#1

MAJOR SOURCE OPERATING PERMIT

PERMITTEE:	CHEROKEE NITROGEN LLC
FACILITY NAME:	CHEROKEE NITROGEN LLC
FACILITY/PERMIT NO.:	701-0013
LOCATION:	CHEROKEE, COLBERT COUNTY, ALABAMA

In accordance with and subject to the provisions of the Alabama Air Pollution Control Act of 1971, as amended, Ala. Code 1975, §§22-28-1 to 22-28-23 (2006 Rplc. Vol. and 2007 Cum. Supp.) (the "AAPCA") and the Alabama Environmental Management Act, as amended, Ala. Code 1975, §§22-22A-1 to 22-22A-15, (2006 Rplc. Vol. and 2007 Cum. Supp.) and rules and regulations adopted thereunder, and subject further to the conditions set forth in this permit, the Permittee is hereby authorized to construct, install and use the equipment, device or other article described above.

*Pursuant to the **Clean Air Act of 1990**, all conditions of this permit are federally enforceable by EPA, the Alabama Department of Environmental Management, and citizens in general. Those provisions which are not required under the **Clean Air Act of 1990** are considered to be state permit provisions and are not federally enforceable by EPA and citizens in general. Those provisions are contained in separate sections of this permit.*

Issuance Date:	March 4, 2013
Effective Date:	January 1, 2013
Most Recent Modification :	March 18, 2015
Expiration Date:	December 31, 2017

Alabama Department of Environmental Management

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Summary Page for Nitric Acid Plant No. 1

Permitted Operating Schedule:

24 Hrs/day x 7 Days/week x 52 Weeks/yr = 8760 Hrs/yr

Emission limitations:

Emission Point #	Description	Pollutant	Emission limit	Regulation
002	Nitric Acid Plant No. 1 350 Tons 100% Acid per Day With Selective Catalytic Reduction (SCR) Unit for control	NO_x	0.6 lb/ton of 100% Nitric Acid Produced (365-day rolling average basis, including startup, shutdown, and malfunction related emissions)	Rule 335-3-14-.04/ Consent Decree
002	Nitric Acid Plant No. 1 with SCR Unit for control	NO_x	1.0 lb/ton of 100% Nitric Acid Produced (3-hour rolling average basis, excluding startup, shutdown, and malfunction related emissions)	Rule 335-3-14-.04/ Consent Decree
002	Nitric Acid Plant No. 1 with SCR Unit for control	CO_2e	None	N/A
002	Nitric Acid Plant No. 1 with SCR Unit for control	Visible Emissions	Opacity is limited to 10% in any 6 minute period	Rule 335-3-10-.02(5)

Provisos for Nitric Acid Plant No. 1

Federally Enforceable Provisos	Regulations
Applicability	
1. This unit is subject to ~~the applicable requirements of~~ 40 CFR 60 Subpart A - General Provisions.	Consent Decree
2. This unit is subject to ~~the applicable requirements of~~ 40 CFR 60 Subpart G – Nitric Acid Plants.	Consent Decree
3. This source is subject to the applicable requirements of ADEM Admin. Code R.335-3-16-.03, "Major Source Operating Permits."	Rule 335-3-16-.03
4. This unit is subject to the opacity emission rates.	Rule 335-3-10-.02(5)
5. This source is subject to a synthetic minor PSD limit.	Rule 335-3-14-.04
6. This source is subject to the Compliance Assurance Monitoring rule set forth in 40 CFR Part 64.	40 CFR Part 64
Emission Standards	
1. This unit shall not discharge into the atmosphere opacity greater than ten percent (10%)	Rule 335-3-10-.02(5)
2. This unit shall not operate without venting to the Selective Catalytic Reduction (SCR) unit for control.	Rule 335-3-14-.04 and Consent Decree
3. This source shall not discharge into the atmosphere Nitrogen Oxides in excess of 0.6 pounds per ton of 100% nitric acid produced. This emission limit (as measured by the CEMs) shall be based on a rolling 365-day average basis, inclusive of startup, shutdown, and malfunction related emissions.	Rule 335-3-14-.04 and Consent Decree
4. This unit shall not discharge into the atmosphere Nitrogen Oxides in excess of 1.0 pounds per ton of 100% nitric acid produced. This emission limit (as measured by the CEMs) shall be based on a 3-hour rolling average basis, exclusive of startup, shutdown, and malfunction related emissions.	Rule 335-3-14-.04 and Consent Decree
5. The NO_X emission limits for this plant were established pursuant to a negotiated Consent Decree (effective May 28, 2014) with the United States and the State of Alabama, and cannot be relaxed without the approval of EPA and the State of Alabama.	Consent Decree
Compliance and Performance Test Methods and Procedures	
1. Emission tests for nitrogen oxides are to be conducted in accordance with the requirements of Method 7E of 40CFR60 Appendix A. Alternate test methods may be used provided prior approval by the Department is granted.	Rule 335-3-10-.03(1)
2. Visible emissions shall be determined using Method 9 of 40 CFR 60 Appendix A.	Rule 335-3-10-.03(1)

Federally Enforceable Provisos	Regulations
Emission Monitoring	
1. A continuous nitrogen oxide monitor shall be installed, calibrated, maintained, and operated in accordance with the requirements of 40 CFR 60 Appendix B and Attachment C of the Consent Decree (effective May 28, 2014), which is incorporated into this permit as Nitric Acid Plant CEMS Plan included in these Proposed Provisos. This is considered to meet the compliance assurance monitoring requirements of 40 CFR Part 64.	Rule 335-3-10-.03(2) and 40 CFR Part 64 and Consent Decree
2. Visible emissions from the exhaust stack of the SCR shall be monitored on a weekly basis by someone familiar with Method 9 of 40 CFR 60, Appendix A. If visible emissions are observed greater than the 10% opacity limit, corrective action shall be taken immediately, but no later than 24 hours. Once corrective actions have been completed, additional visual opacity observations shall be performed.	Rule 335-3-10-.02(5)
3. Emission tests for nitrogen oxides are to be conducted at intervals not to exceed 24 months following the date of the initial compliance testing.	Rule 335-3-14-.04
Recordkeeping and Reporting Requirements	
1. Records of each month's hours of operation and production shall be kept in a permanent form suitable and readily available for inspection.	Rule 335-3-14-.04
2. A written report of excess NO_x emissions, as determined by the monitoring system, shall be submitted to the Department every calendar quarter in accordance with 40 CFR 60.7	Rule 335-3-10-.02(1)
3. Records shall be kept of all visible emission observations required under Emission Monitoring of this section and of any corrective action taken. These records shall be kept in a permanent form suitable for inspection for a period of at least 5 years.	Rule 335-3-16-.05
4. A report summarizing the information in proviso 1 of this section shall be submitted each calendar quarter with the excess emissions report	Rule 335-3-1-.04

Summary Page for Nitric Acid Plant No. 2

Permitted Operating Schedule:

24 Hrs/day x 7 Days/week x 52 Weeks/yr = 8760 Hrs/yr

Emission limitations:

Emission Point #	Description	Pollutant	Emission limit	Regulation
003	Nitric Acid Plant No. 2 680 tons of 100% Acid per Day With Selective Catalytic Reduction (SCR) Unit for control	NO_x	0.6 lb/ton of 100% Nitric Acid Produced (365-day rolling average basis, including startup, shutdown, and malfunction related emissions)	Rule 335-3-14-.04/ Consent Decree
003	Nitric Acid Plant No. 2 with SCR Unit for control	NO_x	1.0 lb/ton of 100% Nitric Acid Produced (3-hour rolling average basis, excluding startup, shutdown, and malfunction related emissions)	Rule 335-3-14-.04/ Consent Decree
003	Nitric Acid Plant No. 2 with SCR Unit for control	CO_2e	None	N/A
003	Nitric Acid Plant No. 2 with SCR Unit for control	Visible Emissions	Opacity is limited to 10% in any 6 minute period	Rule 335-3-10-.02(5)

Provisos for Nitric Acid Plant No. 2

Federally Enforceable Provisos	Regulations
Applicability	
1. This unit is subject to the applicable requirements of 40 CFR 60 Subpart A - General Provisions.	Rule 335-3-10-.02(1) and Consent Decree
2. This unit is subject to the applicable requirements of 40 CFR 60 Subpart G – Nitric Acid Plants.	Rule 335-3-10-.02(5) and Consent Decree
3. This source is subject to the applicable requirements of ADEM Admin. Code R.335-3-16-.03, "Major Source Operating Permits."	Rule 335-3-16-.03
4. This unit is subject to the opacity emission rates.	Rule 335-3-10-.02(5)
5. This unit is subject to a synthetic minor PSD limit	Rule 335-3-14-.04
6. This source is subject to the Compliance Assurance Monitoring rule set forth in 40 CFR Part 64.	40 CFR Part 64
Emission Standards	
1. This unit shall not discharge into the atmosphere opacity greater than ten percent (10%).	Rule 335-3-10-.02(5)
2. This unit shall not operate without venting to the Selective Catalytic Reduction (SCR) unit for control.	Rule 335-3-14-.04 and Consent Decree
3. This unit shall not discharge into the atmosphere Nitrogen Oxides in excess of 0.6 pounds per ton of 100% nitric acid produced. This emission limit (as measured by the CEMs) shall be based on a rolling 365-day average basis, inclusive of startup, shutdown, and malfunction related emissions.	Rule 335-3-14-.04 and Consent Decree
4. This unit shall not discharge into the atmosphere Nitrogen Oxides in excess of 1.0 pounds per ton of 100% nitric acid produced. This emission limit (as measured by the CEMs) shall be based on a 3-hour rolling average basis, exclusive of startup, shutdown, and malfunction related emissions.	Rule 335-3-14-.04 and Consent Decree
5. The NO_X emission limits for this plant were established pursuant to a negotiated Consent Decree (effective May 28, 2014) with the United States and the State of Alabama, and cannot be relaxed without the approval of EPA and the State of Alabama.	Consent Decree
Compliance and Performance Test Methods and Procedures	
1. Emission tests for nitrogen oxides, if required, are to be conducted in accordance with the requirements of Method 7E of 40 CFR 60 Appendix A. Alternate test methods may be used provided prior approval by the Department is granted.	Rule 335-3-10-.03(1)
2. Visible emissions shall be determined using Method 9 of 40 CFR 60 Appendix A.	Rule 335-3-10-.03(1)

Federally Enforceable Provisos	Regulations
Emission Monitoring	
1. A continuous nitrogen oxide monitor shall be installed, calibrated, maintained, and operated subject to requirements of 40 CFR 60 Appendix B and Attachment C of the Consent Decree (effective May 28, 2014), which is incorporated into this permit as Nitric Acid Plant CEMS Plan included in these Proposed Provisos. This is considered to meet the compliance assurance monitoring requirements of 40 CFR Part 64.	Rule 335-3-10-.03(2) and 40 CFR Part 64 and Consent Decree
2. Visible emissions from the exhaust stack of the SCR shall be monitored on a weekly basis by someone familiar with Method 9 of 40 CFR 60, Appendix A. If visible emissions are observed greater than the 10% opacity limit, corrective action shall be taken immediately, but no later than 24 hours. Once corrective actions have been completed, additional visual opacity observations shall be performed.	Rule 335-3-10-.02(5)
Recordkeeping and Reporting Requirements	
1. Records of each month's hours of operation and production shall be kept in a permanent form suitable and readily available for inspection.	Rule 335-3-14-.04
2. A written report of excess NOx emissions, as determined by the monitoring system, shall be submitted to the Department every calendar quarter in accordance with 40CFR60.7	Rule 335-3-10-.02(1)
3. Records shall be kept of all visible emission observations required under Emission Monitoring of this section and of any corrective action taken. These records shall be kept in a permanent form suitable for inspection for a period of at least 5 years.	Rule 335-3-16-.05
4. A report summarizing the information in proviso 1 of this section shall be submitted each calendar quarter with the excess emissions report.	Rule 335-3-1-.04

Summary Page for Ammonium Nitrate Plant Neutralization

Permitted Operating Schedule:

24 Hrs/day x 7 Days/week x 52 Weeks/yr = 8760 Hrs/yr

Emission limitations:

Emission Point #	Description	Pollutant	Emission limit	Regulation
004	No. 1 Neutralizer with gas scrubber for control	PM	24.2 lb/hr	Rule 335-3-4-.04(1)
004	No. 1 Neutralizer	Ammonia	N/A	N/A
004	No. 1 Neutralizer	Nitric Acid	N/A	N/A
004	No. 1 Neutralizer	Visible Emissions	Opacity is limited to 20% in any 6 minute period	Rule 335-3-4-.01

Provisos for Ammonium Nitrate Plant Neutralization

Federally Enforceable Provisos	Regulations
Applicability	
1. This source is subject to the applicable requirements of ADEM Admin. Code R.335-3-16-.03, "Major Source Operating Permits."	Rule 335-3-16-.03
2. This unit is subject to the opacity emission rates.	Rule 335-3-4-.01
3. This unit is subject to the particulate emission rates.	Rule 335-3-4-.04(1)
4. This source is subject to the Compliance Assurance Monitoring rule set forth in 40 CFR Part 64.	40 CFR Part 64
Emission Standards	
1. This unit shall not discharge into the atmosphere opacity greater than twenty percent (20%), as determined by a six (6) minute average. During one six (6) minute period during any sixty (60) minute period, this unit may discharge opacity not to exceed forty percent (40%).	Rule 335-3-4-.01
2. This unit shall not discharge into the atmosphere particulate matter in excess of, $E = 3.59(P^{0.62})$ where P is the process weight in tons/hr.	Rule 335-3-4-.04(1)
3. This unit shall not operate without venting to the Gas Scrubber for control.	Rule 335-3-14
Compliance and Performance Test Methods and Procedures	
1. Visible emissions shall be determined using Method 9 of 40CFR60 Appendix A.	Rule 335-3-10-.03(1)
2. Particulate emission testing, if required, shall be in accordance with Method 5 of 40CFR60 Appendix A. Alternate test methods may be used provided prior approval by the Department is granted.	Rule 335-3-10-.03(1)
Emission Monitoring	
1. The neutralizer solution shall be monitored every two hours during operation to maintain the acidity reading from -0.10 (acidic) to +0.30 (basic). This is considered to meet the compliance assurance monitoring requirements of 40 CFR Part 64.	Rule 335-3-14 and 40 CFR Part 64

Federally Enforceable Provisos	Regulations
Recordkeeping and Reporting Requirements	
1. Records shall be kept of neutralizer solution acidity as required under Emission Monitoring of this section. These records shall be kept for at least five (5) years from the generation and made available upon request.	Rule 335-3-14

Summary Page for Ammonium Nitrate Prilling Unit

Permitted Operating Schedule:

24 Hrs/day x 7 Days/week x 52 Weeks/yr = 8760 Hrs/yr

Emission limitations:

Emission Point #	Description	Pollutant	Emission limit	Regulation
005a	Prill Tower	PM	**	Rule 335-3-14-.04
005b	Wet Scrubber	PM	**	
005c	Dry scrubber	PM	**	
			Sum of emissions from all emission points is limited to 0.90 lbs per ton of production*	

Provisos for Ammonium Nitrate Prilling Unit

Federally Enforceable Provisos	Regulations
Applicability	
1. This source is subject to the applicable requirements of ADEM Admin. Code R.335-3-16-.03, "Major Source Operating Permits."	Rule 335-3-16-.03
2. This unit is subject to the opacity emission rates.	Rule 335-3-4-.01
3. This unit is subject to a synthetic minor PSD limit.	Rule 335-3-14-.04
4. The dry scrubber (Emission Point 005c) of this source is subject to the Compliance Assurance Monitoring rule set forth in 40 CFR Part 64.	40 CFR Part 64
Emission Standards	
1. This unit shall not discharge into the atmosphere opacity greater than twenty percent (20%), as determined by a six (6) minute average. During one six (6) minute period during any sixty (60) minute period, this unit may discharge opacity not to exceed forty percent (40%).	Rule 335-3-4-.01
2. This unit shall not discharge into the atmosphere particulate matter in excess of 0.90 pounds per ton of production from all emission points combined.	Rule 335-3-14-.04
3. This unit is shall not produce more than 149,000 tons in any consecutive 12 month period.	Rule 335-3-14-.04
Compliance and Performance Test Methods and Procedures	
1. Particulate emissions shall be determined in accordance with the requirements of Method 5 of 40CFR60 Appendix A.	Rule 335-3-10-.03(1)
2. Visible emissions shall be determined using Method 9 of 40CFR60 Appendix A.	Rule 335-3-10-.03(1)
Emission Monitoring	
1. Emission tests for particulate matter from all emission points are to be conducted at intervals not to exceed 12 months following the date of the initial compliance testing.	Rule 335-3-14
2. Visible emissions shall be monitored on a weekly basis by someone familiar with Method 9 of 40CFR60 Appendix A. If visible emissions are observed, a Visual Determination of Opacity shall be performed using EPA Method 9 or corrective action shall be taken within one (1) hour of discovery. If the Visual Determination of Opacity confirms that the source is discharging particulate emissions above the emission limits specified in General Proviso 29 of this permit, corrective action shall be taken within one (1) hour to reduce particulate emissions below limits specified in General Proviso 29 of this	Rule 335-3-4-.01

Federally Enforceable Provisos	Regulations
permit.	
3. Wet Scrubber blower motor amps shall be monitored to determine that the scrubber is operating within the acceptable range of 335 amps ± 50 amps. Monitoring of the scrubber pump amps shall be done at least once every 8 hours.	Rule 335-3-14
4. Dry Scrubber blower motor amps shall be monitored to determine that the scrubber is operating within the acceptable range of 258 amps ± 26 amps. Monitoring of the scrubber pump amps shall be done at least once every 8 hours. This is considered to meet the compliance assurance monitoring requirements of 40 CFR Part 64.	Rule 335-3-14 and 40 CFR Part 64
Recordkeeping and Reporting Requirements	
1. Records of each month's hours of operation and production shall be kept in a permanent form suitable and readily available for inspection.	Rule 335-3-14
2. Records shall be kept of any visible emission observations required under Emission Monitoring of this section and of any corrective action taken. These records shall be kept for at least five (5) years from the generation and made available upon request.	Rule 335-3-14
3. Records of wet and dry scrubber blower motor amps shall be kept in a permanent form suitable for inspection. These records shall be kept for at least five (5) years from the generation and made available upon request.	Rule 335-3-14
4. A report summarizing the information in provisos 1 and 2 of this section shall be submitted each calendar quarter by the 30th day of the month following the end of the quarter, in a format approved by the Department in advance.	Rule 335-3-1-.04

Summary Page for 97.6 MMBTU/hr Boiler Natural Gas with Low NO_x Burners and with No.2 Fuel Oil Backup

Permitted Operating Schedule:

24 Hrs/day x 7 Days/week x 52 Weeks/yr = 8760 Hrs/yr

Emission limitations:

Emission Point #	Description	Pollutant	Emission limit	Regulation
006	97.6 MMBTU/hr Boiler	SO_2	0.5 lb/MMBTU	Rule 335-3-10-.02(c)
006	97.6 MMBTU/hr Boiler	Visible Emission	Opacity is limited to 20% in any 6 minute period	Rule 335-3-10-.02(c)
006	97.6 MMBTU/hr Boiler	PM	18 lb/hr	Rule 335-3-4-.03(1)
006	97.6 MMBTU/hr Boiler	NOx	N/A	N/A
006	97.6 MMBTU/hr Boiler	CO	N/A	N/A
006	97.6 MMBTU/hr Boiler	VOC	N/A	N/A

Provisos for 97.6 MMBTU/hr Boiler

Federally Enforceable Provisos	Regulations
Applicability	
1. This source is subject to the applicable requirements of New Source Performance Standards 40 CFR 60 Subpart A - General Provisions.	Rule 335-3-10-.02(1)
2. This source is subject to the applicable requirements of New Source Performance Standards 40 CFR 60 Subpart Dc – Standards of Performance for Small Industrial-Commercial-Institutional Steam Generating Units.	Rule 335-3-10-.02(2)(c)
3. This source is subject to the applicable requirements of ADEM Admin. Code R.335-3-16-.03, "Major Source Operating Permits."	Rule 335-3-16-.03
4. This unit is subject to the opacity emission rates.	Rule 335-3-4-.01
5. This unit is subject to a synthetic minor PSD limit.	Rule 335-3-14-.04
Emission Standards	
1. Visible emissions from this source shall not exceed an opacity of 20% except one 6-minute period every 60 minutes not to exceed 27% when firing No. 2 fuel oil.	Rule 335-3-10-.02(2)(c)
2. This unit shall not discharge into the atmosphere opacity greater than twenty percent (20%), as determined by a six (6) minute average. During one six (6) minute period during any sixty (60) minute period, this unit may discharge opacity not to exceed forty percent (40%), when firing natural gas.	Rule 335-3-4-.01
3. This source is limited to firing natural gas or No. 2 fuel oil with a sulfur content of less than 0.5 percent.	Rule 335-3-14-.04
4. This source is limited to 855 MMSCF of natural gas and 71,604 gallons of No. 2 fuel oil in any consecutive twelve month period.	Rule 335-3-14-.04
5. This unit shall not discharge into the atmosphere Sulfur Dioxide emissions in excess of 0.5 lb/MMBTU of heat input.	Rule 335-3-10-.02(2)(c)
6. This unit shall not discharge into the atmosphere particulate matter in excess of, $E = 1.38 (H)^{-0.44}$ where H is the heat input in millions of BTU/hr (18 lb/hr).	Rule 335-3-4-.03(1)
Compliance and Performance Test Methods and Procedures	
1. Visible emissions shall be determined using Method 9 of 40CFR60 Appendix A.	Rule 335-3-10-.03(1)

Federally Enforceable Provisos	Regulations
Emission Monitoring	
1. Visible emissions shall be monitored on a weekly basis by someone familiar with Method 9 of 40CFR60 Appendix A. If visible emissions are observed, a Visual Determination of Opacity shall be performed using EPA Method 9 or corrective action shall be taken within one (1) hour of discovery. If the Visual Determination of Opacity confirms that the source is discharging particulate emissions above the emission limits specified in General Proviso 29 of this permit (or Proviso 1 of the Emission Standards section of this permit, if applicable), corrective action shall be taken within one (1) hour to reduce particulate emissions below limits specified in General Proviso 29 of this permit (or Proviso 1 of the Emission Standards section of this permit, if applicable).	Rule 335-3-4-.01
2. Vendor certification of fuel oil sulfur content shall be obtained for each shipment received.	Rule 335-3-10-.02(2)(c)
Recordkeeping and Reporting Requirements	
1. Records of daily fuel usage shall be kept in a permanent form suitable for inspection. These records shall be kept for at least five (5) years from the date of generation and made available upon request.	Rule 335-3-10-.02(2)(c)
2. Records of vendor certification of sulfur content of No. 2 fuel oil shall be kept in a permanent form suitable for inspection. These records shall be kept for at least five (5) years from the generation and made available upon request.	Rule 335-3-10-.02(2)(c)
3. Records shall be kept of any visible emission observations required under Emission Monitoring of this section and of any corrective action taken. These records shall be kept for at least five (5) years from the generation and made available upon request.	Rule 335-3-14

Summary Page for 30,000 Gallon No. 2 Fuel Oil Storage Tank

Permitted Operating Schedule:

24 Hrs/day x 7 Days/week x 52 Weeks/yr = 8760 Hrs/yr

Emission limitations:

Emission Point #	Description	Pollutant	Emission limit	Regulation
007	Storage Tank	VOC	N/A	N/A

Provisos for 30,000 Gallon No. 2 Fuel Oil Storage Tank

Federally Enforceable Provisos	Regulations
Applicability	
1. This source is subject to the applicable requirements of ADEM Admin. Code R.335-3-16-.03, "Major Source Operating Permits."	Rule 335-3-16-.03
Emission Standards	
1. This tank is limited to storing No. 2 Fuel Oil.	Rule 335-3-16-.05
Compliance and Performance Test Methods and Procedures	
1. This source is subject to no additional specific requirements than those listed in the General Permit Provisos.	N/A
Emission Monitoring	
1. This source is subject to no additional specific requirements than those listed in the General Permit Provisos.	N/A
Recordkeeping and Reporting Requirements	
1. The owner or operator shall keep records of tank dimensions, capacity, and contents.	Rule 335-3-16-.05

Summary Page for 2,000 Gallon Gasoline Storage Tank

Permitted Operating Schedule:

24 Hrs/day x 7 Days/week x 52 Weeks/yr = 8760 Hrs/yr

Emission limitations:

Emission Point #	Description	Pollutant	Emission limit	Regulation
009	2,000 Gallon Gasoline Storage Tank	HAP	N/A	40 CFR Part 63, Subpart CCCCCC
009	2,000 Gallon Gasoline Storage Tank	VOC	N/A	Rule 335-3-6-.03

Provisos for 2,000 Gallon Gasoline Storage Tank

Federally Enforceable Provisos	Regulations
Applicability	
1. This source is subject to the applicable requirements of ADEM Admin. Code R.335-3-16-.03, "Major Source Operating Permits."	Rule 335-3-16-.03
2. This source is subject to the applicable requirements of National Emission Standards for Hazardous Air Pollutants for Source Categories: Gasoline Dispensing Facilities, 40 CFR 63 Subpart CCCCCC.	40 CFR 63, Subpart CCCCCC
3. This source is subject to the applicable requirements of ADEM Admin. Code R.335-3-6-.03, "Loading and Storage of VOC."	Rule 335-3-6-.03
Emission Standards	
1. The monthly throughput shall be less than 10,000 gallons of gasoline.	40 CFR 63, Subpart CCCCCC
Compliance and Performance Test Methods and Procedures	
1. This source is subject to no additional specific requirements than those listed in the General Permit Provisos.	N/A
Emission Monitoring	
1. This source is subject to no additional specific requirements than those listed in the General Permit Provisos.	N/A
Recordkeeping and Reporting Requirements	
1. Records of monthly gasoline throughput shall be kept. These records shall be kept for at least five (5) years from the date of generation and made available upon request.	40 CFR 63, Subpart CCCCCC

Summary Page for Diesel Fired Engine for Water Pump

Permitted Operating Schedule:

24 Hrs/day x 7 Days/week x 52 Weeks/yr = 8760 Hrs/yr

Emission limitations:

Emission Point #	Description	Pollutant	Emission limit	Regulation
010	Diesel Fired Engine for Water Pump	PM	Opacity is limited to 20% in any 6 minute period	Rule 335-3-4-.01
010	Diesel Fired Engine for Water Pump	HAPs	N/A	40 CFR 63, Subpart ZZZZ

Provisos for Diesel Fired Engine for Water Pump

Federally Enforceable Provisos	Regulations
Applicability	
1. This source is subject to the applicable requirements of ADEM Admin. Code R.335-3-16-.03, "Major Source Operating Permits."	Rule 335-3-16-.03
2. This source is subject to the applicable requirements of the National Emissions Standards for Hazardous Air Pollutants for Stationary Reciprocating Internal Combustion Engines, 40 CFR 63 Subpart ZZZZ.	40 CFR 63, Subpart ZZZZ
3. This unit is subject to the opacity emission rates.	Rule 335-3-4-.01
Emission Standards	
1. This unit shall not discharge into the atmosphere opacity greater than twenty percent (20%), as determined by a six (6) minute average. During one six (6) minute period during any sixty (60) minute period, this unit may discharge opacity not to exceed forty percent (40%).	Rule 335-3-4-.01
2. This source shall adhere to the parameters set forth in Table 2d of 40 CFR 63, Subpart ZZZZ.	40 CFR 63, Subpart ZZZZ
Compliance and Performance Test Methods and Procedures	
1. This source shall be operated and maintained in accordance with the manufacturers emission-related written instructions, if available, or a maintenance plan shall be developed which must provide to the extent practicable for the maintenance and operation of the engine in a manner consistent with good air pollution control practice for minimizing emissions.	40 CFR 63, Subpart ZZZZ
2. Visible emissions shall be determined using Method 9 of 40CFR60 Appendix A.	Rule 335-3-10-.03(1)
Emission Monitoring	
1. Visible emissions shall be monitored on a weekly basis, if the unit is operated during that week, by someone familiar with Method 9 of 40CFR60 Appendix A. If visible emissions above 20% opacity are observed, a Visual Determination of Opacity shall be performed using EPA Method 9 or corrective action shall be taken within one (1) hour of discovery. If the Visual Determination of Opacity confirms that the source is discharging particulate emissions above the emission limits specified in General Proviso 29 of this permit, corrective action shall be taken within one (1) hour to reduce particulate emissions below limits specified in General Proviso 29 of this permit.	Rule 335-3-4-.01

Federally Enforceable Provisos	Regulations
Recordkeeping and Reporting Requirements	
1. Records shall be kept of all maintenance conducted on this unit. These records shall be kept for at least five (5) years from the date of generation and made available upon request.	40 CFR 63, Subpart ZZZZ
2. Records shall be kept of the date, time, duration, and purpose of operation each time the unit is operated. These records shall be kept for at least five (5) years from the generation and made available upon request.	40 CFR 63, Subpart ZZZZ
3. Records shall be kept of any visible emission observations required under Emission Monitoring of this section and of any corrective action taken. These records shall be kept for at least five (5) years from the generation and made available upon request.	Rule 335-3-4-.01

Summary Page for 16.5 MMBTU/hr Natural Gas Fired Boiler

Permitted Operating Schedule:

24 Hrs/day x 7 Days/week x 52 Weeks/yr = 8760 Hrs/yr

Emission limitations:

Emission Point #	Description	Pollutant	Emission limit	Regulation
011	16.5 MMBTU/hr Boiler	SO_2	4.0 lb/MMBTU (66 lb/hr)	Rule 335-3-5-.01(1)
011	16.5 MMBTU/hr Boiler	Visible Emission	Opacity is limited to 20% in any 6 minute period	Rule 335-3-4-.01
011	16.5 MMBTU/hr Boiler	PM	0.40 lb/MMBTU (6.6 lb/hr)	Rule 335-3-4-.03(1)
011	16.5 MMBTU/hr Boiler	NOx	N/A	N/A
011	16.5 MMBTU/hr Boiler	CO	N/A	N/A
011	16.5 MMBTU/hr Boiler	VOC	N/A	N/A

Provisos for 16.5 MMBTU/hr Boiler

Federally Enforceable Provisos	Regulations
Applicability	
1. This source is subject to the applicable requirements of New Source Performance Standards 40 CFR 60 Subpart A - General Provisions.	Rule 335-3-10-.02(1)
2. This source is subject to the applicable requirements of New Source Performance Standards 40 CFR 60 Subpart Dc – Standards of Performance for Small Industrial-Commercial-Institutional Steam Generating Units.	Rule 335-3-10-.02(2)(c)
3. This source is subject to the applicable requirements of ADEM Admin. Code R.335-3-16-.03, "Major Source Operating Permits."	Rule 335-3-16-.03
4. This unit is subject to the opacity emission rates.	Rule 335-3-4-.01
Emission Standards	
1. This unit shall not discharge into the atmosphere opacity greater than twenty percent (20%), as determined by a six (6) minute average. During one six (6) minute period during any sixty (60) minute period, this unit may discharge opacity not to exceed forty percent (40%).	Rule 335-3-4-.01
2. This source is limited to firing natural gas.	Rule 335-3-14-.04
3. This unit shall not discharge into the atmosphere Sulfur Dioxide emissions in excess of 4.0 lb/MMBTU of heat input (66 lb/hr).	Rule 335-3-5-.01(1)
4. This unit shall not discharge into the atmosphere particulate matter in excess of 0.4 lb/MMBTU of heat input (6.6 lb/hr).	Rule 335-3-4-.03(1)
Compliance and Performance Test Methods and Procedures	
1. Visible emissions shall be determined using Method 9 of 40CFR60 Appendix A.	Rule 335-3-10-.03(1)
Emission Monitoring	
1. Visible emissions from the exhaust stack shall be monitored on a weekly basis by someone familiar with Method 9 of 40 CFR 60, Appendix A. If visible emissions are observed greater than the 20% opacity limit, corrective action shall be taken immediately, but no later than 24 hours. Once corrective actions have been completed, additional visual opacity observations shall be performed.	Rule 335-3-4-.01

Federally Enforceable Provisos	Regulations
Recordkeeping and Reporting Requirements	
1. Records of monthly fuel usage shall be kept in a permanent form suitable for inspection. These records shall be kept for at least five (5) years from the date of generation and made available upon request.	Rule 335-3-10-.02(2)(c)
2. Records shall be kept of any visible emission observations required under Emission Monitoring of this section and of any corrective action taken. These records shall be kept for at least five (5) years from the date of generation and made available upon request.	Rule 335-3-4-.01

APPENDIX CAM

Compliance Assurance Monitoring Requirements

CAM Plan for Nitric Acid Plant No. 1- Selective Catalytic Reduction Unit (Emission Point 002)

	Indicator 1	Indicator 2
I. Indicator	NOx hourly emissions	N/A
Measurement Approach	Continuously monitor NOx emissions	N/A
II. Indicator Range	1 lb NOx/ton 100% nitric acid produced (3-hour rolling average basis, excluding SSM)	N/A
III. Performance Criteria		
1. Representative Data	Emission measurements being made at the emission point	N/A
2. Verification of Operation Status	CEMS is in place and operating, verification not applicable	N/A
3. QA/QC Practices and Criteria	Calibration of the CEMS will be performed in accordance with the QA/QC Plan	N/A
4. Monitoring Frequency	Continuously monitor NOx emissions using a CEMS	N/A
5. Data collection Procedures	CEMS device	N/A
6. Averaging Period	3-hour average basis	N/A

CAM Plan for Nitric Acid Plant No. 2 – Selective Catalytic Reduction Unit (Emission Point 003)

	Indicator 1	Indicator 2
I. Indicator	NOx hourly emissions	N/A
Measurement Approach	Continuously monitor NOx emissions	N/A
II. Indicator Range	1 lb NOx/ton 100% nitric acid produced (3-hour rolling average basis, excluding SSM)	N/A
III. Performance Criteria		
1. Representative Data	Emission measurements being made at the emission point	N/A
2. Verification of Operation Status	CEMS is in place and operating, verification not applicable	N/A
3. QA/QC Practices and Criteria	Calibration of the CEMS will be performed in accordance with the QA/QC Plan	N/A
4. Monitoring Frequency	Continuously monitor NOx emissions using a CEMS	N/A
5. Data collection Procedures	CEMS device	N/A
6. Averaging Period	3-hour average basis	N/A

CAM Plan for Ammonium Nitrate Plant No. 1 Neutralizer - Scrubber (Emission Point 004)

	Indicator 1	Indicator 2
I. Indicator	Acidity of neutralizer solution	N/A
Measurement Approach	Neutralizer solution will be monitored every 2 hours during operation to maintain the acidity	N/A
II. Indicator Range	-0.10 (acidic) to +0.30 (basic)	N/A
III. Performance Criteria		
7. Representative Data	Measurements being made at the emission point	N/A
8. Verification of Operation Status	N/A	N/A
9. QA/QC Practices and Criteria	Lab QA/QC procedures will be followed	N/A
10. Monitoring Frequency	The acidity will be measured and recorded every 2 hours during operation	N/A
11. Data collection Procedures	A sample of the neutralizer solution will be collected manually, and the acidity of the solution will be tested. The measured acidity will be recorded manually in a log book.	N/A
12. Averaging Period	N/A	N/A

CAM Plan for Ammonium Nitrate Prilling Unit – Dryer Scrubber (Emission Point 005c)

	Indicator 1	Indicator 2
I. Indicator	Scrubber blower motor amps	N/A
Measurement Approach	The scrubber blower motor amperage will be monitored once every 8 hours to ensure that the blower motor is operating within an acceptable range	N/A
II. Indicator Range	Minimum 230 Amps ; Maximum 282 Amps	N/A
III. Performance Criteria		
1. Representative Data	Measurements being made at the emission point	N/A
2. Verification of Operation Status	N/A	N/A
3. QA/QC Practices and Criteria	N/A	N/A
4. Monitoring Frequency	A reading of the blower motor amperage will be taken once every 8 hours	N/A
5. Data collection Procedures	The amperage gauge will be manually read and recorded in a log book	N/A
6. Averaging Period	N/A	N/A

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ADEM AL0000418

ALABAMA DEPARTMENT OF ENVIRONMENTAL MANAGEMENT

POST OFFICE BOX 301463 • 1400 COLISEUM BLVD. 36110-2059
MONTGOMERY, ALABAMA 36130-1463
WWW.ADEM.STATE.AL.US
(334) 271-7700

JAMES W. WARR
DIRECTOR

DON SIEGELMAN
GOVERNOR

Facsimiles: (334)
Administration: 271-7950
General Counsel: 394-4332
Air: 279-3044
Land: 279-3050
Water: 279-3051
Groundwater: 270-5631
Field Operations: 272-8131
Laboratory: 277-6718
Mining: 394-4326
Education/Outreach: 394-4383

September 28, 2000

DON PHILLIPS
PLANT MANAGER
LAROCHE INDUSTRIES INC
P O BOX 250
CHEROKEE AL 35616

RE: Final NPDES Permit
NPDES Permit Number AL0000418

Dear Mr. Phillips:

Attached is the issued copy of the above referenced permit.

We will look forward to receiving monitoring data in accordance with the conditions of your Permit. Please see PART I.C., Page 3 for your reporting requirements. In order to minimize the paperwork burden on both of us, we ask that when submitting the required Discharge Monitoring Reports (DMR's), please **do not submit** lab worksheets, logs, reports or other paperwork, not specifically required by the permit unless requested to do so by ADEM staff.

If there are questions or comments in reference to the permit or related monitoring requirements, please contact Tom Cleveland of this office (334) 271-7850.

Sincerely,

Edgar K. Hughes, Chief
Industrial Section
Water Division

TRC/ar

Enclosure: Final Permit

cc: EPA Region IV: Final Permit

Mike McCary, P & S: Final Permit

Montgomery Field Office: Final Permit

Birmingham
110 Vulcan Road
Birmingham, Alabama 35209-4702
(205) 942-6168
(205) 941-1603 [Fax]

Decatur
2708 6th Avenue, SE, Suite B
Decatur, Alabama 35603-1508
(256) 353-1713
(256) 340-9359 [Fax]

Mobile
2204 Perimeter Road
Mobile, Alabama 36615-1131
(334) 450-3400
(334) 479-2593 [Fax]

Mobile – Coastal
4171 Commanders Drive
Mobile, Alabama 36615-1421
(334) 432-6533
(334) 432-6598 [Fax]

ADEM

ALABAMA
DEPARTMENT OF ENVIRONMENTAL MANAGEMENT

NATIONAL POLLUTANT DISCHARGE ELIMINATION SYSTEM PERMIT

PERMITTEE:	LAROCHE INDUSTRIES, INC.
FACILITY LOCATION:	COLBERT COUNTY ROAD 25 CHEROKEE, ALABAMA
PERMIT NUMBER:	AL0000418
RECEIVING WATERS:	TENNESSEE RIVER

In accordance with and subject to the provisions of the Federal Water Pollution Control Act, as amended, 33 U.S.C. §§1251-1378 (the "FWPCA"), the Alabama Water Pollution Control Act, as amended, Code of Alabama 1975, §§ 22-22-1 to 22-22-14 (the "AWPCA"), the Alabama Environmental Management Act, as amended, Code of Alabama 1975, §§22-22A-1 to 22-22A-15, and rules and regulations adopted thereunder, and subject further to the terms and conditions set forth in this permit, the Permittee is hereby authorized to discharge into the above-named receiving waters.

ISSUANCE DATE:	SEPTEMBER 28, 2000
EFFECTIVE DATE:	OCTOBER 1, 2000
EXPIRATION DATE:	SEPTEMBER 30, 2005

Alabama Department of Environmental Management

NATIONAL POLLUTANT DISCHARGE ELIMINATION SYSTEM (NPDES) PERMIT
TABLE OF CONTENTS

PART I

A. DISCHARGE LIMITATIONS AND MONITORING REQUIREMENTS

During the period beginning on the effective date of this permit and lasting through the expiration date of this permit, the permittee is authorized to discharge from the following point source(s) outfall(s), described more fully in the permittee's application:

3/ DSN001: Total facility discharge including DSN001a, non-contact cooling water and storm water runoff.

Such discharge shall be limited and monitored by the permittee as specified below:

EFFLUENT CHARACTERISTIC	UNITS	DISCHARGE LIMITATIONS			MONITORING REQUIREMENTS 1/	
		Daily Minimum	Daily Maximum	Monthly Average 2/	Measurement Frequency	Sample Type
Flow	MGD	-	Monitor	Monitor	Continuous	Totalized
pH	s.u.	6.0	9.0	-	Daily	Grab
Fecal Coliform	colonies/100ml	-	200	200	1/Week	Grab
Oil & Grease	mg/l	-	15	10	1/Week	Grab
Total Residual Chlorine	mg/l	-	0.019	0.011	1/Week	Grab
Acute Toxicity Biomonitoring 4/	% Mortality	-	10	-	1/Quarter	Grab
Temperature 5/	°F	-	109	107	1/Week	Grab

THE DISCHARGE SHALL HAVE NO SHEEN, AND THERE SHALL BE NO DISCHARGE OF VISIBLE OIL, FLOATING SOLIDS, OR VISIBLE FOAM IN OTHER THAN TRACE AMOUNTS

1/ Samples collected to comply with the monitoring requirements specified above shall be collected at the following location: At the nearest accessible location just prior to discharge and after final treatment. Unless otherwise specified, composite samples shall be time composite samples collected using automatic sampling equipment or a minimum of eight (8) equal volume grab samples collected over equal time intervals. All composite samples shall be collected for the total period of discharge not to exceed 24 hours.

2/ Monthly average limits apply only when a parameter is monitored more than once in a month.

3/ See Part IV.B. for Best Management Practices (BMP) Plan Requirements.

4/ See Part IV.C. for Effluent Toxicity Testing and Biomonitoring Requirements.

5/ This is an end-of-pipe limitation which shall not cause the Alabama Water Quality Standard of 86° F for the Tennessee River to be violated at the edge of the mixing zone previously established in accordance with ADEM regulations. The maximum in-stream temperature rise at the edge of the mixing zone shall not exceed 5° F above the upstream temperature. Monitoring shall be performed during the months of May, June, July, August, September, and October. Samples shall be collected at the facility's final discharge weir.

PART I

A. DISCHARGE LIMITATIONS AND MONITORING REQUIREMENTS

During the period beginning on the effective date of this permit and lasting through the expiration date of this permit, the permittee is authorized to discharge from the following point source(s) outfall(s), described more fully in the permittee's application:

3/ **DSN001a: Process wastewater from Ammonia Plant, Nitric Acid Plant #1, Nitric Acid Plant #2, Urea Plant, Ammonium Nitrate Plant, sanitary wastewaters and storm water runoff.**

Such discharge shall be limited and monitored by the permittee as specified below:

EFFLUENT CHARACTERISTIC	UNITS	DISCHARGE LIMITATIONS			MONITORING REQUIREMENTS 1/	
		Daily Minimum	Daily Maximum	Monthly Average 2/	Measurement Frequency	Sample Type
Flow	MGD	-	Monitor	Monitor	Continuous	Totalized
Ammonia as Nitrogen	lbs/day	-	525	262	1/week	Composite
Organic Nitrogen as Nitrogen	lbs/day	-	414	221	1/week	Composite
Nitrate as Nitrogen	lbs/day	-	563	218	1/week	Composite
Oil and Grease	mg/l	-	15	10	1/week	Grab

1/ Samples collected to comply with the monitoring requirements specified above shall be collected at the following location: At the nearest accessible location just prior to discharge and after final treatment. Unless otherwise specified, composite samples shall be time composite samples collected using automatic sampling equipment or a minimum of eight (8) equal volume grab samples collected over equal time intervals. All composite samples shall be collected for the total period of discharge not to exceed 24 hours.

2/ Monthly average limits apply only when a parameter is monitored more than once in a month.

3/ See Part IV.B. for Best Management Practices (BMP) Plan Requirements.

PART I

A. DISCHARGE LIMITATIONS AND MONITORING REQUIREMENTS

During the period beginning on the effective date of this permit and lasting through the expiration date of this permit, the permittee is authorized to discharge from the following point source(s) outfall(s), described more fully in the permittee's application:

4/ DSN002: Storm water runoff from spray irrigation of agricultural cropland.

Such discharge shall be limited and monitored by the permittee as specified below:

EFFLUENT CHARACTERISTIC	UNITS	DISCHARGE LIMITATIONS			MONITORING REQUIREMENTS 1/	
		Daily Minimum	Daily Maximum	Monthly Average 2/	Measurement Frequency	Sample Type
Flow	MGD	-	Monitor	-	1/quarter	3/
pH	s.u.	Monitor	Monitor	-	1/quarter	Grab
Ammonia as Nitrogen	mg/l	-	Monitor	-	1/quarter	Grab
Total Organic Nitrogen	mg/l	-	Monitor	-	1/quarter	Grab
Total Suspended Solids	mg/l	-	Monitor	-	1/quarter	Grab

THE DISCHARGE SHALL HAVE NO SHEEN, AND THERE SHALL BE NO DISCHARGE OF VISIBLE OIL, FLOATING SOLIDS, OR VISIBLE FOAM IN OTHER THAN TRACE AMOUNTS

1/ Samples collected to comply with the monitoring requirements specified above shall be collected at the following location: At the nearest accessible location just prior to discharge and after final treatment. Unless otherwise specified, composite samples shall be time composite samples collected using automatic sampling equipment or a minimum of eight (8) equal volume grab samples collected over equal time intervals. All composite samples shall be collected for the total period of discharge not to exceed 24 hours.

2/ Monthly average limits apply only when a parameter is monitored more than once in a month.

3/ See Part IV.A. for Storm Water Flow Measurement and Sampling Requirements.

4/ See Part IV.B. for Best Management Practices (BMP) Plan Requirements.

PART I

A. DISCHARGE LIMITATIONS AND MONITORING REQUIREMENTS

During the period beginning on the effective date of this permit and lasting through the expiration date of this permit, the permittee is authorized to discharge from the following point source(s) outfall(s), described more fully in the permittee's application:

4/ DSN003: Storm water runoff from spray irrigation of agricultural cropland.

Such discharge shall be limited and monitored by the permittee as specified below:

EFFLUENT CHARACTERISTIC	UNITS	DISCHARGE LIMITATIONS			MONITORING REQUIREMENTS 1/	
		Daily Minimum	Daily Maximum	Monthly Average 2/	Measurement Frequency	Sample Type
Flow	MGD	-	Monitor	-	1/quarter	3/
pH	s.u.	Monitor	Monitor	-	1/quarter	Grab
Ammonia as Nitrogen	mg/l	-	Monitor	-	1/quarter	Grab
Total Organic Nitrogen	mg/l	-	Monitor	-	1/quarter	Grab
Total Suspended Solids	mg/l	-	Monitor	-	1/quarter	Grab

THE DISCHARGE SHALL HAVE NO SHEEN, AND THERE SHALL BE NO DISCHARGE OF VISIBLE OIL, FLOATING SOLIDS, OR VISIBLE FOAM IN OTHER THAN TRACE AMOUNTS

1/ Samples collected to comply with the monitoring requirements specified above shall be collected at the following location: At the nearest accessible location just prior to discharge and after final treatment. Unless otherwise specified, composite samples shall be time composite samples collected using automatic sampling equipment or a minimum of eight (8) equal volume grab samples collected over equal time intervals. All composite samples shall be collected for the total period of discharge not to exceed 24 hours.

2/ Monthly average limits apply only when a parameter is monitored more than once in a month.

3/ See Part IV.A. for Storm Water Flow Measurement and Sampling Requirements.

4/ See Part IV.B. for Best Management Practices (BMP)Plan Requirements.

B. DISCHARGE MONITORING AND RECORD KEEPING REQUIREMENTS

1. Representative Sampling

Samples and measurements taken as required herein shall be representative of the volume and nature of the monitored discharge and shall be in accordance with the provisions of this permit.

2. Test Procedures

For the purpose of reporting and compliance, permittees shall use one of the following procedures:

a. For parameters with an EPA established Minimum Level (ML), report the measured value if the analytical result is at or above the ML and report "0" for values below the ML. Test procedures for the analysis of pollutants shall conform to 40 CFR Part 136 and guidelines published pursuant to Section 304(h) of the FWPCA, 33 U.S.C. Section 1314(h). If more than one method for analysis of a substance is approved for use, a method having a minimum level lower than the permit limit shall be used. If the minimum level of all methods is higher than the permit limit, the method having the lowest minimum level shall be used and a report of less than the minimum level shall be reported as zero and will constitute compliance, however should EPA approve a method with a lower minimum level during the term of this permit the permittee shall use the newly approved method.

b. For pollutants parameters without an established ML, an interim ML may be utilized. The interim ML shall be calculated as 3.18 times the Method Detection Level (MDL) calculated pursuant to 40 CFR Part 136, Appendix B.

Permittees may develop an effluent matrix-specific ML, where an effluent matrix prevents attainment of the established ML. However, a matrix specific ML shall be based upon proper laboratory method and technique. Matrix-specific MLs must be approved by the Department, and may be developed by the permittee during permit issuance, reissuance, modification, or during compliance schedule.

In either case the measured value should be reported if the analytical result is at or above the ML and "0" reported for values below the ML.

c. For parameters without an EPA established ML, interim ML, or matrix-specific ML, a report of less than the detection limit shall constitute compliance if the detection limit of all analytical methods is higher than the permit limit. For the purpose of calculating a monthly average, "0" shall be used for values reported less than the detection limit.

The Minimum Level utilized for procedures A and B above shall be reported on the permittee's DMR. When an EPA approved test procedure for analysis of a pollutant does not exist, the Director shall approve the procedure to be used.

3. Recording of Results

For each measurement or sample taken pursuant to the requirements of this permit, the permittee shall record the following information:

a. The facility name and location, point source number, date, time and exact place of sampling;

b. The name(s) of person(s) who obtained the samples or measurements;

c. The dates and times the analyses were performed;

d. The name(s) of the person(s) who performed the analyses;

e. The analytical techniques or methods used, including source of method and method number; and

f. The results of all required analyses.

4. Records Retention and Production

a. The permittee shall retain records of all monitoring information, including all calibration and maintenance records and all original strip chart recordings for continuous monitoring instrumentation, copies of all reports required by the permit, and records of all data used to complete the above reports or the application for this permit, for a period of at least three years from the date of the sample measurement, report or application. This period may be extended by request of the Director at any time. If litigation or other enforcement action, under the AWPCA and/or the FWPCA, is ongoing which involves any of the above records, the records shall be kept until the litigation is resolved. Upon the written request of the Director or his designee, the

permittee shall provide the Director with a copy of any record required to be retained by this paragraph. Copies of these records shall not be submitted unless requested.

b. All records required to be kept for a period of three years shall be kept at the permitted facility or an alternate location approved by the Department in writing and shall be available for inspection.

5. Monitoring Equipment and Instrumentation

All equipment and instrumentation used to determine compliance with the requirements of this permit shall be installed, maintained, and calibrated in accordance with the manufacturer's instructions or, in the absence of manufacturer's instructions, in accordance with accepted practices. At a minimum, flow measurement devices shall be calibrated at least once every 12 months.

C. DISCHARGE REPORTING REQUIREMENTS

1. Reporting of Monitoring Requirements

a. The permittee shall conduct the required monitoring in accordance with the following schedule:

MONITORING REQUIRED MORE FREQUENTLY THAN MONTHLY AND MONTHLY shall be conducted during the first full month following the effective date of coverage under this permit and every month thereafter.

QUARTERLY MONITORING shall be conducted at least once during each calendar quarter. Calendar quarters are the periods of January through March, April through June, July through September, and October through December. The permittee shall conduct the quarterly monitoring during the first complete calendar quarter following the effective date of this permit and is then required to monitor once during each quarter thereafter. Quarterly monitoring may be done anytime during the quarter, unless restricted elsewhere in this permit, but it should be reported on the last DMR due for the quarter, i.e. (March, June, September and December DMRs).

SEMIANNUAL MONITORING shall be conducted at least once during the period of January through June and at least once during the period of July through December. The permittee shall conduct the semiannual monitoring during the first complete calendar semiannual period following the effective date of this permit and is then required to monitor once during each semiannual period thereafter. Semiannual monitoring may be done anytime during the semiannual period, unless restricted elsewhere in this permit, but it should be reported on the last DMR due for the month of the semiannual period, i.e. (June and December DMRs).

ANNUAL MONITORING shall be conducted at least once during the period of January through December. The permittee shall conduct the annual monitoring during the first complete calendar annual period following the effective date of this permit and is then required to monitor once during each annual period thereafter. Annual monitoring may be done anytime during the year, unless restricted elsewhere in this permit, but it should be reported on the December DMR.

b. The permittee shall submit discharge monitoring reports (DMRs) on the forms provided by the Department and in accordance with the following schedule:

REPORTS OF MORE FREQUENTLY THAN MONTHLY AND MONTHLY TESTING shall be submitted on a **monthly** basis. The first report is due on the **28th day of November 2000**. The reports shall be submitted so that they are received by the Department no later than the 28th day of the month following the reporting period.

REPORTS OF QUARTERLY TESTING shall be submitted on a [quarterly] basis. The first report is due on the 28th day of [ ]. The reports shall be submitted so that they are received by the Department no later than the 28th day of the month following the reporting period.

REPORTS OF SEMIANNUAL TESTING shall be submitted on a [semiannual] basis. The reports are due on the 28th day of JANUARY and the 28th day of JULY. The reports shall be submitted so that they are received by the Department no later than the 28th day of the month following the reporting period.

REPORTS OF ANNUAL TESTING shall be submitted on an [annual] basis. The first report is due on the 28th day of JANUARY . The reports shall be submitted so that they are received by the Department no later than the 28th day of the month following the reporting period.

c. The DMR must be legible and bear an original signature. Photo and electronic copies of the signature ar not acceptable and shall not satisfy the reporting requirements of this permit. If the permittee, usin approved analytical methods as specified in Provision I. B. 2. monitors any discharge from a point sourc for a limited substance identified in Provision I. A. of this permit more frequently than required by thi permit, the results of such monitoring shall be included in the calculation and reporting of values on th DMR Form and the increased frequency shall be indicated on the DMR Form. In the event no discharg from a point source identified in Provision I. A of this permit and described more fully in the permittee' application occurs during a monitoring period, the permittee shall report "No Discharge" for such period o the appropriate DMR Form.

d. All reports and forms required to be submitted by this permit, the AWPCA and the Department's Rules an regulations, shall be signed by a "responsible official" of the permittee as defined in ADEM Administrativ Code Rule 335-6-6-.09 or a "duly authorized representative" of such official as defined in ADE Administrative Code Rule 335-6-6-.09 and shall bear the following certification:

"I certify under penalty of law that this document and all attachments were prepared under m direction or supervision in accordance with a system designed to assure that qualified personne properly gather and evaluate the information submitted. Based on my inquiry of the person o persons who manage the system, or those persons directly responsible for gathering information, the information submitted is, to the best of my knowledge and belief, true, accurate, and complete. I am aware that there are significant penalties for submitting false information, including the possibility of fine and imprisonment for knowing violations."

e. The permittee may certify in writing that a discharge will not occur for an extended period of time and after such certification shall not be required to submit monitoring reports. Written notification of a planned resumption of discharge shall be submitted at least 30 days prior to resumption of the discharge. If an unplanned resumption of discharge occurs, written notification shall be submitted within 7 days of the resumption. In any case, all discharges shall comply with all provisions of this permit.

f. All reports and forms required to be submitted by this permit, the AWPCA and the Department's Rules, shall be addressed to:

Alabama Department of Environmental Management
Industrial Section, Water Division
Post Office Box 301463
Montgomery, Alabama 36130-1463

2. Noncompliance Notification

a. If for any reason, the permittee's discharge (1) does not comply with any daily minimum or maximum discharge limitation for an effluent characteristic specified in Provision I. A. of this permit which is denoted by an "(X)", (2) threatens human health or welfare, fish or aquatic life, or water quality standards, (3) does not comply with an applicable toxic pollutant effluent standard or prohibition established under Section 307(a) of the FWPCA, 33 U.S.C. Section 1317(a), (4) contains a quantity of a hazardous substance which has been determined may be harmful to public health or welfare under Section 311(b)(4) of the FWPCA, 33 U.S.C. Section 1321(b)(4), (5) exceeds any discharge limitation for an effluent characteristic as a result of an unanticipated bypass or upset, or (6) is an unpermitted direct or indirect discharge of a pollutant to a water of the state (unpermitted discharges properly reported to the Department under any other requirement are not required to be reported under this provision), the permittee shall orally report the occurrence and circumstances of such discharge to the Director within 24-hours after the permittee becomes aware of the occurrence of such discharge. In addition to the oral report, the permittee shall submit to the Director or Designee a written report as provided in Provision I. C. 2. c. no later than five (5) days after becoming aware of the occurrence of such discharge.

b. If for any reason, the permittee's discharge does not comply with any limitation of this permit, the permittee shall submit to the Director or Designee a written report as provided in Provision I. C. 2. c. below, such report shall be submitted with the next Discharge Monitoring Report required to be submitted by Provision I. C. 1. of this permit after becoming aware of the occurrence of such noncompliance.

c. Any written report required to be submitted to the Director or Designee by Provision I. C. 2 a. or b. shall be submitted using a copy of the Noncompliance Notification Form provided with this permit and shall include the following information:

(1) A description of the discharge and cause of noncompliance;
(2) The period of noncompliance, including exact dates and times or, if not corrected, the anticipated time the noncompliance is expected to continue; and

(3) A description of the steps taken and/or being taken to reduce or eliminate the noncomplying discharge and to prevent its recurrence.

D. OTHER REPORTING AND NOTIFICATION REQUIREMENTS

1. Anticipated Noncompliance

The permittee shall give the Director written advance notice of any planned changes or other circumstances regarding a facility which may result in noncompliance with permit requirements.

2. Termination of Discharge

The permittee shall notify the Director, in writing, when all discharges from any point source(s) identified in Provision I. A. of this permit have permanently ceased. This notification shall serve as sufficient cause for instituting procedures for modification or termination of the permit.

3. Updating Information

a. The permittee shall inform the Director of any change in the permittee's mailing address or telephone number or in the permittee's designation of a facility contact or office having the authority and responsibility to prevent and abate violations of the AWPCA, the Department's Rules and the terms and conditions of this permit, in writing, no later than ten (10) days after such change. Upon request of the Director or his designee, the permittee shall furnish the Director with an update of any information provided in the permit application.

b. If the permittee becomes aware that it failed to submit any relevant facts in a permit application, or submitted incorrect information in a permit application or in any report to the Director, it shall promptly submit such facts or information with a written explanation for the mistake and/or omission.

4. Duty to Provide Information

The permittee shall furnish to the Director, within a reasonable time, any information which the Director or his designee may request to determine whether cause exists for modifying, revoking and re-issuing, suspending, or terminating this permit, in whole or in part, or to determine compliance with this permit.

5. Cooling Water and Boiler Water Additives

a. The permittee shall notify the Director in writing not later than thirty (30) days prior to instituting the use of any biocide corrosion inhibitor or chemical additive in a cooling or boiler system, not identified in the application for this permit, from which discharge is allowed by this permit. Notification is not required for additives that do not contain a heavy metal(s) as an active ingredient and that pass through a wastewater treatment system prior to discharge nor is notification required for additives that should not reasonably be expected to cause the cooling water or boiler water to exhibit toxicity as determined by analysis of manufacturer's data or testing by the permittee. Such notification shall include:

(1) name and general composition of biocide or chemical,
(2) 96-hour median tolerance limit data for organisms representative of the biota of the waterway into which the discharge will ultimately reach,
(3) quantities to be used,
(4) frequencies of use,
(5) proposed discharge concentrations, and
(6) EPA registration number, if applicable.

b. The use of a biocide or additive containing tributyl; tin, tributyl tin oxide, zinc, chromium or related compounds in cooling or boiler system(s), from which a discharge regulated by this permit occurs, is prohibited except as exempted below. The use of a biocide or additive containing zinc, chromium or related compounds may be used in special circumstances if (1) the permit contains limits for these substances, or (2) the applicant demonstrates during the application process that the use of zinc, chromium or related compounds as a biocide or additive will not pose a reasonable potential to violate the applicable State water quality standards for these substances. The use of any additive, not identified in this permit or in the application for this permit or not exempted from notification under this permit is prohibited, prior to a determination by the Department that permit modification to control discharge of the additive is not required or prior to issuance of a permit modification controlling discharge of the additive.

6. Permit Issued Based On Estimated Characteristics

a. If this permit was issued based on estimates of the characteristics of a process discharge reported on an EPA NPDES Application Form 2D (EPA Form 3510-2D), the permittee shall complete and submit an EPA NPDES Application Form 2C (EPA Form 3510-2C) no later than two years after the date that discharge begins. Sampling required for completion of the Form 2C shall occur when a discharge(s) from the process(s) causing the new or increased discharge is occurring. If this permit was issued based on estimates concerning the composition of a storm water discharge(s), the permittee shall perform the sampling required by EPA NPDES Application Form 2F (EPA Form 3510-2F) no later than one year after the industrial activity generating the storm water discharge has been fully initiated.

b. This permit shall be reopened if required to address any new information resulting from the completion and submittal of the Form 2C and or 2F.

E. SCHEDULE OF COMPLIANCE

1. The permittee shall achieve compliance with the discharge limitations specified in Provision I. A. in accordance with the following schedule:

COMPLIANCE SHALL BE ATTAINED ON THE EFFECTIVE DATE OF THIS PERMIT

2. No later than 14 calendar days following a date identified in the above schedule of compliance, the permittee shall submit either a report of progress or, in the case of specific actions being required by identified dates, a written notice of compliance or noncompliance. In the latter case, the notice shall include the cause of noncompliance, any remedial actions taken, and the probability of meeting the next scheduled requirement.

PART II

A. OPERATIONAL AND MANAGEMENT REQUIREMENTS

1. Facilities Operation and Maintenance

The permittee shall at all times properly operate and maintain all facilities and systems of treatment and control (and related appurtenances) which are installed or used by the permittee to achieve compliance with the conditions of the permit. Proper operation and maintenance includes effective performance, adequate funding, adequate operator staffing and training, and adequate laboratory and process controls, including appropriate quality assurance procedures. This provision requires the operation of backup or auxiliary facilities only when necessary to achieve compliance with the conditions of the permit.

2. Best Management Practices

a. Dilution water shall not be added to achieve compliance with discharge limitations except when the Director or his designee has granted prior written authorization for dilution to meet water quality requirements.

b. The permittee shall prepare, implement, and maintain a Spill Prevention, Control and Countermeasures (SPCC) Plan in accordance with 40 C.F.R. Section 112 if required thereby.

c. The permittee shall prepare, submit for approval and implement a Best Management Practices (BMP) Plan for containment of any or all process liquids or solids, in a manner such that these materials do not present a significant potential for discharge, if so required by the Director or his designee. When submitted and approved, the BMP Plan shall become a part of this permit and all requirements of the BMP Plan shall become requirements of this permit.

3. Spill Prevention, Control, and Management

The permittee shall provide spill prevention, control, and/or management sufficient to prevent any spills of pollutants from entering a water of the state or a publicly or privately owned treatment works. Any containment system used to implement this requirement shall be constructed of materials compatible with the substance(s) contained and which shall prevent the contamination of groundwater and such containment system shall be capable of retaining a volume equal to 110 percent of the capacity of the largest tank for which containment is provided.

B. OTHER RESPONSIBILITIES

1. Duty to Mitigate Adverse Impacts

The permittee shall promptly take all reasonable steps to mitigate and minimize or prevent any adverse impact on human health or the environment resulting from noncompliance with any discharge limitation specified in Provision I. A. of this permit, including such accelerated or additional monitoring of the discharge and/or the receiving waterbody as necessary to determine the nature and impact of the noncomplying discharge.

2. Right of Entry and Inspection

The permittee shall allow the Director, or an authorized representative, upon the presentation of proper credentials and other documents as may be required by law to:

a. enter upon the permittee's premises where a regulated facility or activity is located or conducted, or where records must be kept under the conditions of the permit;

b. have access to and copy, at reasonable times, any records that must be kept under the conditions of the permit;

c. inspect at reasonable times any facilities, equipment (including monitoring and control equipment), practices, or operations regulated or required under the permit; and

d. sample or monitor at reasonable times, for the purposes of assuring permit compliance or as otherwise authorized by the AWPCA, any substances or parameters at any location.

C. BYPASS AND UPSET

1. Bypass

a. Any bypass is prohibited except as provided in b. and c. below:

b. A bypass is not prohibited if:

(1) It does not cause any discharge limitation specified in Provision I. A. of this permit to be exceeded; and

(2) It is necessary for essential maintenance of a treatment or control facility or system to assure efficient operation of such facility or system.

c. A bypass is not prohibited and need not meet the discharge limitations specified in Provision I. A. of this permit if:

(1) It is unavoidable to prevent loss of life, personal injury, or severe property damage;

(2) There are no feasible alternatives to the bypass, such as the use of auxiliary treatment facilities, retention of untreated wastes, or maintenance during normal periods of equipment downtime (this condition is not satisfied if adequate back-up equipment should have been installed in the exercise of reasonable engineering judgment to prevent a bypass which occurred during normal periods of equipment downtime or preventive maintenance); and

(3) The permittee submits a written request for authorization to bypass to the Director at least ten (10) days prior to the anticipated bypass (if possible), the permittee is granted such authorization, and the permittee complies with any conditions imposed by the Director to minimize any adverse impact on human health or the environment resulting from the bypass.

d. The permittee has the burden of establishing that each of the conditions of Provision II. C. 1. b. or c. have been met to qualify for an exception to the general prohibition against bypassing contained in a. and an exemption, where applicable, from the discharge limitations specified in Provision I. A. of this permit.

2. Upset

a. A discharge which results from an upset need not meet the discharge limitations specified in Provision I. A. of this permit if:

(1) No later than 24-hours after becoming aware of the occurrence of the upset, the permittee orally reports the occurrence and circumstances of the upset to the Director or his designee; and

(2) No later than five (5) days after becoming aware of the occurrence of the upset, the permittee furnishes the Director with evidence, including properly signed, contemporaneous operating logs, or other relevant evidence, demonstrating that (i) an upset occurred; (ii) the permittee can identify the specific cause(s) of the upset; (iii) the permittee's facility was being properly operated at the time of the upset; and (iv) the permittee promptly took all reasonable steps to minimize any adverse impact on human health or the environment resulting from the upset.

b. The permittee has the burden of establishing that each of the conditions of Provision II C. 2. a. of this permit have been met to qualify for an exemption from the discharge limitations specified in Provision I. A. of this permit.

D. DUTY TO COMPLY WITH PERMIT, RULES, AND STATUTES

1. Duty to Comply

a. The permittee must comply with all conditions of this permit. Any permit noncompliance constitutes a violation of the AWPCA and the FWPCA and is grounds for enforcement action, for permit termination, revocation and reissuance, suspension, modification; or denial of a permit renewal application.

b. The necessity to halt or reduce production or other activities in order to maintain compliance with the conditions of the permit shall not be a defense for a permittee in an enforcement action.

c. The discharge of a pollutant from a source not specifically identified in the permit application for this permit and not specifically included in the description of an outfall in this permit is not authorized and shall constitute noncompliance with this permit.

d. The permittee shall take all reasonable steps, including cessation of production or other activities, to minimize or prevent any violation of this permit or to minimize or prevent any adverse impact of any permit violation.

2. Removed Substances

Solids, sludges, filter backwash, or any other pollutant or other waste removed in the course of treatment or control of wastewaters shall be disposed of in a manner that complies with all applicable Department Rules.

3. Loss or Failure of Treatment Facilities

Upon the loss or failure of any treatment facility, including but not limited to the loss or failure of the primary source of power of the treatment facility, the permittee shall, where necessary to maintain compliance with the discharge limitations specified in Provision I. A. of this permit, or any other terms or conditions of this permit, cease, reduce, or otherwise control production and/or all discharges until treatment is restored.

4. Compliance With Statutes and Rules

a. This permit has been issued under ADEM Administrative Code, Chapter 335-6-6. All provisions of this chapter, that are applicable to this permit, are hereby made a part of this permit. A copy of this chapter may be obtained for a small charge from the Office of General Counsel, Alabama Department of Environmental Management, 1751 Congressman Dickinson Drive, Montgomery, AL 36130.

b. This permit does not authorize the noncompliance with or violation of any Laws of the State of Alabama or the United States of America or any regulations or rules implementing such laws. FWPCA, 33 U.S.C. Section 1319, and Code of Alabama 1975, Section 22-22-14.

E. PERMIT TRANSFER, MODIFICATION, SUSPENSION, REVOCATION, AND REISSUANCE

1. Duty to Reapply or Notify of Intent to Cease Discharge

a. If the permittee intends to continue to discharge beyond the expiration date of this permit, the permittee shall file a complete permit application for reissuance of this permit at least 180 days prior to its expiration. If the permittee does not intend to continue discharge beyond the expiration of this permit, the permittee shall submit written notification of this intent which shall be signed by an individual meeting the signatory requirements for a permit application as set forth in ADEM Administrative Code Rule 335-6-6-.09.

b. Failure of the permittee to apply for reissuance at least 180 days prior to permit expiration will void the automatic continuation of the expiring permit provided by ADEM Administrative Code Rule 335-6-6-.06 and should the permit not be reissued for any reason any discharge after expiration of this permit will be an unpermitted discharge.

2. Change in Discharge

a. The permittee shall apply for a permit modification at least 180 days in advance of any facility expansion production increase, process change, or other action that could result in the discharge of additiona pollutants or increase the quantity of a discharged pollutant such that existing permit limitations would be exceeded or that could result in an additional discharge point. This requirement applies to pollutants tha are or that are not subject to discharge limitations in this permit. No new or increased discharge may begir until the Director has authorized it by issuance of a permit modification or a reissued permit.

b. The permittee shall notify the Director as soon as it is known or there is reason to believe:

(1) That any activity has occurred or will occur which would result in the discharge on a routine or frequent basis, of any toxic pollutant which is not limited in this permit, if that discharge will exceed the highest of the following notification levels:

(a) one hundred micrograms per liter;

(b) two hundred micrograms per liter for acrolein and acrylonitrile; five hundred micrograms per liter for 2,4-dinitrophenol and for 2-methyl-4,6-dini-trophenol; and one milligram per liter for antimony;

(c) five times the maximum concentration value reported for that pollutant in the permit application; or

(2) That any activity has occurred or will occur which would result in any discharge, on a non-routine or infrequent basis, of a toxic pollutant which is not limited in the permit, if that discharge will exceed the highest of the following notification levels:

(a) five hundred micrograms per liter;

(b) one milligram per liter for antimony;

(c) ten times the maximum concentration value reported for that pollutant in the permit application.

3. Transfer of Permit

This permit may not be transferred or the name of the permittee changed without notice to the Director and subsequent modification or revocation and reissuance of the permit to identify the new permittee and to incorporate any other changes as may be required under the FWPCA or AWPCA. In the case of a change in name, ownership or control of the permittee's premises only, a request for permit modification in a format acceptable to the Director is required at least 30 days prior to the change. In the case of a change in name, ownership or control of the permittee's premises accompanied by a change or proposed change in effluent characteristics, a complete permit application is required to be submitted to the Director at least 180 days prior to the change. Whenever the Director is notified of a change in name, ownership or control, he may decide not to modify the existing permit and require the submission of a new permit application.

4. Permit Modification and Revocation

a. This permit may be modified or revoked and reissued, in whole or in part, during its term for cause, including but not limited to, the following:

(1) If cause for termination under Provision II. E. 5. of this permit exists, the Director may choose to revoke and reissue this permit instead of terminating the permit;

(2) If a request to transfer this permit has been received, the Director may decide to revoke and reissue or to modify the permit; or

(3) If modification or revocation and reissuance is requested by the permittee and cause exists, the Director may grant the request.

b. This permit may be modified during its term for cause, including but not limited to, the following:

(1) If cause for termination under Provision II. E. 5. of this permit exists, the Director may choose to modify this permit instead of terminating this permit;

(2) There are material and substantial alterations or additions to the facility or activity generating wastewater which occurred after permit issuance which justify the application of permit conditions that are different or absent in the existing permit;

(3) The Director has received new information that was not available at the time of permit issuance and that would have justified the application of different permit conditions at the time of issuance;

(4) A new or revised requirement(s) of any applicable standard or limitation is promulgated under Sections 301(b)(2)(C), (D), (E), and (F), and 307(a)(2) of the FWPCA;

(5) Errors in calculation of discharge limitations or typographical or clerical errors were made;

(6) To the extent allowed by ADEM Administrative Code, Rule 335-6-6-.17, when the standards or regulations on which the permit was based have been changed by promulgation of amended standards or regulations or by judicial decision after the permit was issued;

(7) To the extent allowed by ADEM Administrative Code, Rule 335-6-6-.17, permits may be modified to change compliance schedules;

(8) To agree with a granted variance under 30l(c), 30l(g), 30l(h), 30l(k), or 3l6(a) of the FWPCA or for fundamentally different factors;

(9) To incorporate an applicable 307(a) FWPCA toxic effluent standard or prohibition;

(10) When required by the reopener conditions in this permit;

(11) When required under 40 CFR 403.8(e) (compliance schedule for development of pretreatment program);

(12) Upon failure of the state to notify, as required by Section 402(b)(3) of the FWPCA, another state whose waters may be affected by a discharge permitted by this permit;

(13) When required to correct technical mistakes, such as errors in calculation, or mistaken interpretations of law made in determining permit conditions; or

(14) When requested by the permittee and the Director determines that the modification has cause and will not result in a violation of federal or state law, regulations or rules; or

5. This permit may be terminated during its term for cause, including but not limited to, the following:

a. Violation of any term or condition of this permit;

b. The permittee's misrepresentation or failure to disclose fully all relevant facts in the permit application or during the permit issuance process or the permittee's misrepresentation of any relevant facts at any time;

c. Materially false or inaccurate statements or information in the permit application or the permit;

d. A change in any condition that requires either a temporary or permanent reduction or elimination of the permitted discharge;

e. The permittee's discharge threatens human life or welfare or the maintenance of water quality standards;

f. Permanent closure of the facility generating the wastewater permitted to be discharged by this permit or permanent cessation of wastewater discharge;

g. New or revised requirements of any applicable standard or limitation that is promulgated under Sections 301(b)(2)(C), (D), (E), and (F), and 307(a)(2) of the FWPCA that the Director determines cannot be complied with by the permittee.

h. Any other cause allowed by the ADEM Administrative Code, Chapter 335-6-6.

6. This permit may be suspended during its term for noncompliance until the permittee has taken action(s) necessary to achieve compliance.

7. The filing of a request by the permittee for modification, suspension or revocation of this permit, in whole or in part, does not stay any permit term or condition.

F. COMPLIANCE WITH TOXIC POLLUTANT STANDARD OR PROHIBITION

If any applicable effluent standard or prohibition (including any schedule of compliance specified in such effluent standard o prohibition) is established under Section 307(a) of the FWPCA, 33 U.S.C. Section 1317(a), for a toxic pollutant discharged by the permittee and such standard or prohibition is more stringent than any discharge limitation on the pollutant specified in Provision I. A. of this permit, or controls a pollutant not limited in Provision I. A. of this permit, this permit shall be modified to conform to the toxic pollutant effluent standard or prohibition and the permittee shall be notified of such modification. If this permit has not been modified to conform to the toxic pollutant effluent standard or prohibition before the effective date of such standard or prohibition, the permittee shall attain compliance with the requirements of the standard or prohibition within the time period required by the standard or prohibition and shall continue to comply with the standard or prohibition until this permit is modified or reissued.

G. DISCHARGE OF WASTEWATER GENERATED BY OTHERS

The discharge of wastewater, generated by any process, facility, or by any other means not under the operational control of the permittee or not identified in the application for this permit or not identified specifically in the description of an outfall in this permit is not authorized by this permit.

PART III

A. CIVIL AND CRIMINAL LIABILITY

1. Tampering

Any person who falsifies, tampers with, or knowingly renders inaccurate any monitoring device or method required to be maintained or performed under the permit shall, upon conviction, be subject to penalties as provided by the AWPCA.

2. False Statements

Any person who knowingly makes any false statement, representation, or certification in any record or other document submitted or required to be maintained under this permit, including monitoring reports or reports of compliance or noncompliance shall, upon conviction, be subject to penalties as provided by the AWPCA.

3. Permit Enforcement

a. Any NPDES permit issued or reissued by the Department is a permit for the purpose of the AWPCA and the FWPCA and as such any terms, conditions, or limitations of the permit are enforceable under state and federal law.

b. Any person required to have a NPDES permit pursuant to ADEM Administrative Code Chapter 335-6-6 and who discharges pollutants without said permit, who violates the conditions of said permit, who discharges pollutants in a manner not authorized by the permit, or who violates applicable orders of the Department or any applicable rule or standard of the Department, is subject to any one or combination of the following enforcement actions under applicable state statutes.

(1) An administrative order requiring abatement, compliance, mitigation, cessation, clean-up, and/or penalties;

(2) An action for damages;

(3) An action for injunctive relief; or

(4) An action for penalties.

4. Relief from Liability

Except as provided in Provision II. C. 1. (Bypass) and Provision II. C. 2. (Upset), nothing in this permit shall be construed to relieve the permittee of civil or criminal liability under the AWPCA or FWPCA for noncompliance with any term or condition of this permit.

B. OIL AND HAZARDOUS SUBSTANCE LIABILITY

Nothing in this permit shall be construed to preclude the institution of any legal action or relieve the permittee from an responsibilities, liabilities or penalties to which the permittee is or may be subject under Section 311 of the FWPCA, 33 U.S.C Section 1321.

C. PROPERTY AND OTHER RIGHTS

This permit does not convey any property rights in either real or personal property, or any exclusive privileges, nor does i authorize any injury to persons or property or invasion of other private rights, or any infringement of federal, state, or loca laws or regulations, nor does it authorize or approve the construction of any physical structures or facilities or the undertakin of any work in any waters of the state or of the United States.

D. AVAILABILITY OF REPORTS

Except for data determined to be confidential under Code of Alabama 1975, Section 22-22-9(c), all reports prepared in accordance with the terms of this permit shall be available for public inspection at the offices of the Department. Effluent data shall not be considered confidential.

E. EXPIRATION OF PERMITS FOR NEW OR INCREASED DISCHARGES

1. If this permit was issued for a new discharger or new source, this permit shall expire eighteen months after the issuance date if construction of the facility has not begun during the eighteen-month period.

2. If this permit was issued or modified to allow the discharge of increased quantities of pollutants to accommodate the modification of an existing facility and if construction of this modification has not begun during the eighteen month period after issuance of this permit or permit modification, this permit shall be modified to reduce the quantities of pollutants allowed to be discharged to those levels that would have been allowed if the modification of the facility had not been planned.

3. Construction has begun when the owner or operator has:

   a. begun, or caused to begin as part of a continuous on-site construction program:

      (1) any placement, assembly, or installation of facilities or equipment; or

      (2) significant site preparation work including clearing, excavation, or removal of existing buildings, structures, or facilities which is necessary for the placement, assembly, or installation of new source facilities or equipment; or

   b. entered into a binding contractual obligation for the purpose of placement, assembly, or installation of facilities or equipment which are intended to be used in its operation within a reasonable time. Options to purchase or contracts which can be terminated or modified without substantial loss, and contracts for feasibility, engineering, and design studies do not constitute a contractual obligation under the paragraph. The entering into a lease with the State of Alabama for exploration and production of hydrocarbons shall also be considered beginning construction.

F. COMPLIANCE WITH WATER QUALITY STANDARDS

1. On the basis of the permittee's application, plans, or other available information, the Department has determined that compliance with the terms and conditions of this permit should assure compliance with the applicable water quality standards.

2. Compliance with permit terms and conditions notwithstanding, if the permittee's discharge(s) from point sources identified in Provision I. A. of this permit cause or contribute to a condition in contravention of state water quality standards, the Department may require abatement action to be taken by the permittee in emergency situations or modify the permit pursuant to the Department's Rules, or both.

3. If the Department determines, on the basis of a notice provided pursuant to this permit or any investigation, inspection or sampling, that a modification of this permit is necessary to assure maintenance of water quality standards or compliance with other provisions of the AWPCA or FWPCA, the Department may require such modification and, in cases of emergency, the Director may prohibit the discharge until the permit has been modified.

G. GROUNDWATER

Unless specifically authorized by a permit issued by the Department, the discharge of pollutants to groundwater is prohibited. Should a threat of groundwater contamination occur, the Director may require groundwater monitoring to properly assess the degree of the problem and the Director may require that the permittee undertake measures to abate any such discharge and/or contamination.

H. DEFINITIONS

1. Average monthly discharge limitation - means the highest allowable average of "daily discharges" over a calendar month, calculated as the sum of all "daily discharges" measured during a calendar month divided by the number of "daily discharges" measured during that month (zero discharge days shall not be included in the number of "daily discharges" measured and a less than detectable test result shall be treated as a concentration of zero if the most sensitive EPA approved method was used).

2. Average weekly discharge limitation - means the highest allowable average of "daily discharges" over a calendar week, calculated as the sum of all "daily discharges" measured during a calendar week divided by the number of "daily discharges" measured during that week (zero discharge days shall not be included in the number of "daily discharges" measured and a less than detectable test result shall be treated as a concentration of zero if the most sensitive EPA approved method was used).

3. AWPCA - means the Alabama Water Pollution Control Act.

4. Bypass - means the intentional diversion of waste streams from any portion of a treatment facility.

5. Daily discharge - means the discharge of a pollutant measured during any consecutive 24-hour period in accordance with the sample type and analytical methodology specified by the discharge permit.

6. Daily maximum - means the highest value of any individual sample result obtained during a day.

7. Daily minimum - means the lowest value of any individual sample result obtained during a day.

8. Day - means any consecutive 24-hour period.

9. Department - means the Alabama Department of Environmental Management.

10. Director - means the Director of the Department.

11. Discharge - means "[t]he addition, introduction, leaking, spilling or emitting of any sewage, industrial waste, pollutant or other waste into waters of the state". Code of Alabama 1975, Section 22-22-1(b)(9).

12. Discharge monitoring report (DMR) - means the form approved by the Director to accomplish reporting requirements of an NPDES permit.

13. EPA - means the United States Environmental Protection Agency.

14. FWPCA - means the Federal Water Pollution Control Act.

15. Permit application - means forms and additional information that is required by ADEM Administrative Code Rule 335-6-6-.08 and applicable permit fees.

16. Point source - means "any discernible, confined and discrete conveyance, including but not limited to any pipe, channel, ditch, tunnel, conduit, well, discrete fissure, container, rolling stock, concentrated animal feeding operation, or vessel or other floating craft, . . . from which pollutants are or may be discharged." Section 502(14) of the FWPCA, 33 U.S.C. Section 1362(14).

17. Pollutant - includes for purposes of this permit, but is not limited to, those pollutants specified in Code of Alabama 1975, Section 22-22-1(b)(3) and those effluent characteristics specified in Provision I. A. of this permit.

18. Severe property damage - means substantial physical damage to property, damage to the treatment facilities which causes them to become inoperable, or substantial and permanent loss of natural resources which can reasonably be expected to occur in the absence of a bypass. Severe property damage does not mean economic loss caused by delays in production.

19. Upset - means an exceptional incident in which there is an unintentional and temporary noncompliance with technology-based permit discharge limitations because of factors beyond the reasonable control of the permittee. An upset does not include noncompliance to the extent caused by operational error, improperly designed treatment facilities, inadequate treatment facilities, lack of preventive maintenance, or careless or improper operation.

20. Waters - means "[a]ll waters of any river, stream, watercourse, pond, lake, coastal, ground or surface water, wholly or partially within the state, natural or artificial. This does not include waters which are entirely confined and retained completely upon the property of a single individual, partnership or corporation unless such waters are used in interstate commerce." Code of Alabama 1975, Section 22-22-1(b)(2). Waters "include all navigable waters" as defined in Section 502(7) of the FWPCA, 22 U.S.C. Section 1362(7), which are within the State of Alabama.

21. Week - means the period beginning at twelve midnight Saturday and ending at twelve midnight the following Saturday.

I. SEVERABILITY

The provisions of this permit are severable, and if any provision of this permit or the application of any provision of this permit to any circumstance is held invalid, the application of such provision to other circumstances, and the remainder of this permit, shall not be affected thereby.

PART IV

A. STORM WATER FLOW MEASUREMENT AND SAMPLING REQUIREMENTS

1. Storm Water Flow Measurement

   a. All storm water samples shall be collected from the discharge resulting from a storm event that is greater than 0.1 inches.

   b. The total volume of storm water discharged for the event must be monitored, including the date and duration (in hours) and rainfall (in inches) for storm event(s) sampled. The duration between the storm event sampled and the end of the previous measurable (greater than 0.1 inch rainfall) storm event must be a minimum of 72 hours. This information must be recorded as part of the sampling procedure and records retained according to Part I.B.4.b. of this permit.

   c. The volume may be measured using flow measuring devices, or estimated based on a modification of the Rational Method using total depth of rainfall, the size of the drainage area serving a storm water outfall, and an estimate of the runoff coefficient of the drainage area. This information must be recorded as part of the sampling procedure and records retained according to Part I.B.4.b. of this permit.

2. Storm Water Sampling

   a. A grab sample, if required by this permit, shall be taken during the first thirty minutes of the discharge (or as soon thereafter as practicable); and a flow-weighted composite sample, if required by this permit, shall be taken for the entire event or for the first three hours of the event.

   b. All test procedures will be in accordance with part I.B.2. of this permit.

B. BEST MANAGEMENT PRACTICES (BMP) PLAN REQUIREMENTS

1. **BMP PLAN**

   The permittee shall develop and implement a Best Management Practices (BMP) plan which prevents, or minimizes the potential for, the release of pollutants from ancillary activities, including material storage areas; plant site runoff; in-plant transfer, process and material handling areas; loading and unloading operations, and sludge and waste disposal areas, to the waters of the State through plant site runoff; spillage or leaks; sludge or waste disposal; or drainage from raw material storage.

2. **IMPLEMENTATION**

   The permittee shall prepare and fully implement the BMP on the effective date of this permit.

3. **GENERAL REQUIREMENTS**

The BMP plan shall:

a. Be documented in narrative form, and shall include any necessary plot plans, drawings or maps;

b. Establish specific objectives for the control of pollutants:

(1) Each facility component or system shall be examined for its potential for causing a release of significant amounts of pollutants to waters of the State due to equipment failure, improper operation, natural phenomena such as rain or snowfall, etc.

(2) Where experience indicates a reasonable potential for equipment failure (e.g., a tank overflow or leakage), natural condition (e.g., precipitation), or other circumstances to result in significant amounts of pollutants reaching surface waters, the plan should include a prediction of the direction, rate of flow, and total quantity of pollutants which could be discharged from the facility as a result of each condition or circumstance.

c. Establish specific best management practices to meet the objectives identified under paragraph b. of this section, addressing each component or system capable of causing a release of significant amounts of pollutants to the waters of the State, and identifying specific preventative or remedial measures to be implemented;

d. Reviewed by plant engineering staff and the plant manager;

e. Provide control sufficient to prevent or control pollution of storm water by soil particles to the degree required to maintain compliance with this permit;

f. Prevent the spillage or loss of fluids, oil, grease, gasoline, etc. from vehicle and equipment maintenance activities and thereby prevent the contamination of storm water from these substances;

g. Prevent or minimize storm water contact with material stored on site;

h. Designate by position or name the person or persons responsible for the day to day implementation of the BMP;

i. Provide for routine inspection, on days during which the facility is manned, of any structures that function to prevent storm water pollution or to remove pollutants from storm water and of the facility in general to ensure that the BMP is continually implemented and effective;

j. Provide for the use and disposal of any material used to absorb spilled fluids that could contaminate storm water;

k. Provide for the proper disposal of all used oils, hydraulic fluids, solvent degreasing material, etc. in accordance with good management practices and any applicable state or federal regulations;

l. Include a diagram of the facility showing the locations where storm water exits the facility, the locations of any structures or other mechanisms intended to prevent pollution of storm water or to remove pollutants from storm water, the locations of any collection and handling systems; and

m. Bear the signature of the plant manager.

4. **DEPARTMENT REVIEW**

a. When requested by the Director or his designee, the permittee shall make the BMP available for Department review.

b. The Director or his designee may notify the permittee at any time that the BMP is deficient and require correction of the deficiency.

c. The permittee shall correct any BMP deficiency identified by the Director or his designee within 30 days of receipt of notification and shall certify to the Department that the correction has been made and implemented.

5. **ADMINISTRATIVE PROCEDURES**

a. A copy of the BMP shall be maintained at the facility and shall be available for inspection by representatives of the Department.

b. A log of the routine inspections required by Item 3.i. of this section shall be maintained at the facility and shall be available for inspection by representatives of the Department. The log shall contain records of all inspections performed for the last three years and each entry shall be signed by the person performing the inspection.

c. The permittee shall provide training for any personnel required to implement the BMP and shall retain documentation of such training at the facility. This documentation shall be available for inspection by representatives of the Department. Training shall be performed prior to the date that implementation of the BMP is required.

d. BMP Plan Modification. The permittee shall amend the BMP plan whenever there is a change in the facility or change in operation of the facility which materially increases the potential for the ancillary activities to result in a discharge of significant amounts of pollutants.

e. BMP Plan Review. The permittee shall complete a review and evaluation of the BMP plan at least once every three years from the date of preparation of the BMP plan.

C. EFFLUENT TOXICITY LIMITATIONS AND BIOMONITORING REQUIREMENTS

The permittee shall perform 48-hour acute toxicity screening tests on undiluted effluent for the wastewater discharges required to be tested for acute toxicity by Part I of this permit.

Test Requirements:

Any test that results that show less than 50% survival and statistically lower than in the control indicate acute toxicity and constitute noncompliance with this permit.

General Test Requirements:

A grab sample shall be obtained for use in the above biomonitoring tests. The holding time for each sample shall not exceed 36 hours. The control water shall be a water prepared in the laboratory in accordance with the EPA procedure referenced below or another control water selected by the permittee and approved by the Department.

Effluent toxicity tests in which the control survival is less than 90% or in which the other requirements of the EPA Test Procedure are not met shall be unacceptable and the permittee shall rerun the tests as soon as practical within the monitoring period.

Reporting Requirements:

Biomonitoring test results obtained during each monitoring period shall be summarized and reported using the appropriate report form approved by the Department and shall be submitted so that the report is received by the Department no later than 28 days following the last day of the monitoring period.

Additional Testing Requirements:

If acute toxicity is indicated (noncompliance with permit limit), the permittee shall perform four additional acute toxicity tests in accordance with these procedures to determine the extent and duration of the toxic condition. The toxicity tests shall be performed once per week and shall be performed during the first four calendar weeks following the date on which the permittee became aware of the permit noncompliance and the results of these tests shall be submitted no later than 28 days following the month in which the tests were performed.

After evaluation of the results of the follow-up tests, the Department will determine if additional action is appropriate and may require additional testing and/or toxicity reduction measures.

Test Methods:

The tests shall be performed in accordance with the latest edition of the "EPA Method for Measuring the Acute Toxicity of Effluents to Freshwater and Marine Organisms" and shall be performed using the fathead minnow (*Pimephales promelas*) and the cladoceran (*Ceriodaphnia dubia*).

After evaluation of the results of the follow-up tests, the Department will determine if additional action is appropriate and may require additional testing and/or toxicity reduction measures.

EFFLUENT TOXICITY TESTING REPORTS

The following information shall be submitted with each discharge monitoring report.

1. Facility name and location
2. Permit number
3. Toxicity testing requirements of permit
4. Name of receiving water body

Source of Effluent and Dilution Water

1. Effluent samples
   a. Sampling point
   b. Collection dates and times
   c. Sample collection method
   d. Physical and chemical data
      (volume of waste flow, dissolved oxygen, water temperature, pH, alkalinity, hardness, specific conductance)
2. Dilution Water
   a. Source
   b. Collection/preparation date(s) and time(s)
   c. Pretreatment (if applicable)
   d. Physical and chemical characteristics
      (dissolved oxygen, water temperature, pH, alkalinity, hardness, specific conductance)

Test Methods

1. Toxicity test method utilized
2. End point(s) of test
3. Deviations from referenced method, if any, and reasons
4. Date and time test started
5. Date and time test terminated
6. Type and volume of test chambers
7. Volume of solution per chamber
8. Number of organisms per test chamber
9. Number of replicate test chambers per treatment
10. Test temperature (mean and range)

Test Organisms

1. Scientific name
2. Life stage and age
3. Source
4. Disease treatment (if applicable)

Quality Assurance

1. Standard toxicant utilized and source
2. Date and time of most recent test
3. Dilution water utilized in test
4. Results (LC50, NOEC, etc.)
5. Physical and chemical methods utilized

Results

1. Provide copies of laboratory bench sheets of all raw data
   a. Physical/chemical data for test concentrations
   b. Biological data – daily records on organisms
2. Indicate statistical methods utilized to calculate endpoints and provide copies of calculations.
3. Provide summary tables of calculations (LC50, NOEC, etc.) and physical/chemical data.

Adapted from "Methods For Measuring the Acute Toxicity of Effluents and Receiving Waters To Freshwater and Marine Organisms", Fourth Edition, Weber, C.I., et al., August 1993 (EPA/600/4-90/027F), Section 12, Report Preparation

D. Land Application Requirements

1. A cover crop over the entire land application area shall be maintained at all times. Cover crop maintenance such as fertilizing, reseeding, etc., shall be performed to assure that the cover is continuously healthy.

2. Wastewater shall not be applied during periods when rain will carry the applied waters off-site, i.e., when percolation will not occur prior to runoff.

3. Wastewater shall not be applied when winds will carry the waste off-site.

4. Records shall be maintained of all pertinent land application system data, including date and volume of application, condition of applied areas, person(s) operating system, and rainfall.

5. The wastewater treatment system used to treat wastewater prior to land application shall at all times be operated in a manner consistent with its approval by the Alabama Department of Environmental Management and shall be kept operational continuously.

6. The land treatment field shall be observed during each application of wastewater to verify that system piping is not broken or leaking. Broken or leaking pipes shall be replaced prior to application of wastewater to the land treatment field.

7. The site shall be limited by any future requirements of ADEM as to operation and maintenance, runoff quality, groundwater quality, or other environmental considerations.

8. Groundwater monitoring for the following parameters shall be performed on a 1/quarter basis:

   Ammonia as Nitrogen
   Total Kjeldahl Nitrogen
   Nitrites/Nitrates as Nitrogen
   Depth to groundwater
   pH
   Conductivity

9. The effluent that is to be land applied shall be monitored on a 1/month basis for the following parameters:

   Nitrogen, Total Organic
   Nitrites/Nitrates as Nitrogen
   pH
   Ammonia as Nitrogen

10. The effluent shall be applied at a rate of not more than 1.5 times the following values for the Nitrogen uptake rates for specific cover crops:

Vegetative Cover (yield goals)	Nitrogen Uptake (kg/ha/yr)
Forage and Field Crops	
Coastal Bermudagrass with rye overseed	570 + 205 = 775
Coastal Bermudagrass	480 – 600
Reed Canary Grass	226-359
Ryegrass	235
Fescue	275
Alfalfa	155 – 220
Sweet Clover	158
Red Clover	77 – 126
Lespedeza Hay	130
Johnson Grass, 27 metric ton/ha	890
Peanuts, 7.5 metric ton/ha	140
Corn, 7.6 – 12.9 m^3/ha	155
Soybeans, 5.2 m^3/ha	94 – 113
Irish Potatoes	108
Cotton	66 – 100
Milo Maize	81
Wheat	50 – 76
Sweet Potatoes	75
Sugar Beets	73
Barley	63

Vegetative Cover (yield goals)	Nitrogen Uptake (kg/ha/yr)
Oats	53
Tobacco, flue cured, 3,300 kg/ha	85
Forest Trees	
Mixed Coniferous & Deciduous	40 – 80
Pines	30 – 70
Deciduous	50 - 100

11. The permittee shall submit to ADEM by January 28th of each year, the results from monitoring in 8 and 9 above. Along with the yearly and monthly totals of the amount of Nitrogen applied to the land treatment area.

ALABAMA DEPARTMENT OF ENVIRONMENTAL MANAGEMENT
WATER DIVISION - INDUSTRIAL SECTION
NONCOMPLIANCE NOTIFICATION FORM

PERMITTEE NAME: _____

PERMIT NUMBER: _____

FACILITY LOCATION: _____

DMR REPORTING PERIOD: _____

1. DESCRIPTION OF DISCHARGE:

   NONCOMPLIANCE PARAMETER(S):

   CAUSE OF NONCOMPLIANCE: (Attach additional pages if necessary)

2. PERIOD OF NONCOMPLIANCE: (Include exact date(s) and time(s) or, if not corrected, the anticipated time the noncompliance is expected to continue):

3. DESCRIPTION OF STEPS TAKEN AND/OR BEING TAKEN TO REDUCE OR ELIMINATE THE NONCOMPLYING DISCHARGE AND TO PREVENT ITS RECURRENCE (attach additional pages if necessary):

_____
NAME OF RESPONSIBLE OFFICIAL (type or print)

_____
TITLE OF RESPONSIBLE OFFICIAL

_____
SIGNATURE OF RESPONSIBLE OFFICIAL

_____
DATE SIGNED

COMPANY: LAROCHE INDUSTRIES, INC.
DSN001

LOCATION: COLBERT COUNTY ROAD 25
CHEROKEE, ALABAMA

NPDES NO. AL0000418

AREA:FL

PARAM	Flow	pH	Fec Col	O & G	TRC	Temp							
MIN	-	6.0	-	-	-	-							
MAX	Monitor	9.0	200	15	0.019	109							
MO. AVG	Monitor	-	200	10	0.011	107							
FREQ	Continuous	Daily	1/week	1/week	1/week	1/week							
UNITS	MGD	s.u.	col/100 ml	mg/l	mgl	°F							
1													
2													
3													
4													
5													
6													
7													
8													
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23													
24													
25													
26													
27													
28													
29													
30													
31													
MAX													
MO.AVG													

I certify under penalty of law that this document and all attachments were prepared under my direction or supervision in accordance with a system designed to assure that qualified personnel properly gather and evaluate the information submitted. Based on my inquiry of the persons or persons who manage the system, or those persons directly responsible for gathering the information, the information submitted is, to the best of my knowledge and belief, true, accurate and complete. I am aware that there are significant penalties for submitting false information, including the possibility of fine and imprisonment for knowing violations.

Signature & Title of Responsible Official _____ Date _____

Printed Name & Title of Responsible Official _____

ADEM 04/2000

ADEM 48 HOUR ACUTE TOXICITY REPORT

COMPANY: LAROCHE INDUSTRIES
LOCATION: COLBERT COUNTY ROAD 25
CITY: CHEROKEE, ALABAMA

MONTH _____, _____
AL0000418
DSN001

MONITORING FREQUENCY Weekly Monthly Quarterly Biannual Yearly Accelerated Testing Yes No AREA: FL

SPECIES	FATHEAD MINNOW	CERIODAPHNIA
TYPE TEST	SURVIVAL	SURVIVAL
IWC OR % EFFLUENT		
MAXIMUM PERMITTED MORTALITY RATE	10%	10%
DATE SAMPLE TAKEN	**% MORTALITY**	**% MORTALITY**

I certify under penalty of law that this document and all attachments were prepared under my direction or supervision in accordance with a system designed to assure that qualified personnel properly gather and evaluate the information submitted. Based on my inquiry of the person or persons who manage the system, or those persons directly responsible for gathering the information, the information submitted is, to the best of my knowledge and belief true, accurate, and complete. I am aware that there are significant penalities for submitting false information, including the possibility of fine and imprisonment for knowing violations.

Signature of Responsible Official _____ Date _____

Diffuser

COMPANY: LAROCHE INDUSTRIES, INC.
DSN001a

LOCATION: COLBERT COUNTY ROAD 25
CHEROKEE, ALABAMA

MONTH _____ , _____

NPDES NO. AL0000418 AREA:FL

PARAM	Flow	NH3-N	ON-N	Nitrate-N	O & G								
MIN	-	-	-	-	-								
MAX	Monitor	525	414	563	15								
MO. AVG	Monitor	262	221	218	10								
FREQ	Continuous	1/week	1/week	1/week	1/week								
UNITS	MGD	lbs/day	lbs/day	lbs/day	mg/l								
1													
2													
3													
4													
5													
6													
7													
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29													
30													
31													
MAX													
MO.AVG													

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Signature & Title of Responsible Official _____ Date _____

Printed Name & Title of Responsible Official _____

DSN002

LOCATION: COLBERT COUNTY ROAD 25
CHEROKEE, ALABAMA

NPDES NO. AL0000418

AREA:FL

PARAM	Flow	pH	NH3-N	TON	TSS								
MIN	-	Monitor	-	-	-								
MAX	Monitor	Monitor	Monitor	Monitor	Monitor								
MO. AVG	-	-	-	-	-								
FREQ	1/quarter	1/quarter	1/quarter	1/quarter	1/quarter								
UNITS	MGD	s.u.	mg/l	mg/l	mg/l								
DATE													
MAX													
MO. AVG													
DATE													
MAX													
MO.AVG													
DATE													
MAX													
MO. AVG													

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Signature & Title of Responsible Official _____

Date _____

Printed Name & Title of Responsible Official _____

DSN003 LOCATION: COLBERT COUNTY ROAD 25
CHEROKEE, ALABAMA
NPDES NO. AL0000418 AREA:FL

PARAM	Flow	pH	NH3-N	TON	TSS								
MIN	-	Monitor	-	-	-								
MAX	Monitor	Monitor	Monitor	Monitor	Monitor								
MO. AVG	-	-	-	-	-								
FREQ	1/quarter	1/quarter	1/quarter	1/quarter	1/quarter								
UNITS	MGD	s.u.	mg/l	mg/l	mg/l								
DATE													
MAX													
MO. AVG													
DATE													
MAX													
MO.AVG													
DATE													
MAX													
MO. AVG													

I certify under penalty of law that this document and all attachments were prepared under my direction or supervision in accordance with a system designed to assure that qualified personnel properly gather and evaluate the information submitted. Based on my inquiry of the persons or persons who manage the system, or those persons directly responsible for gathering the information, the information submitted is, to the best of my knowledge and belief, true, accurate and complete. I am aware that there are significant penalties for submitting false information, including the possibility of fine and imprisonment for knowing violations.

Signature & Title of Responsible Official _____ Date _____

Printed Name & Title of Responsible Official _____

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ADEM

ALABAMA
DEPARTMENT OF ENVIRONMENTAL MANAGEMENT

AIR PERMIT

PERMITEE: LAROCHE INDUSTRIES, INC.

LOCATION: CHEROKEE, ALABAMA

PERMIT NUMBER	DESCRIPTION OF EQUIPMENT, ARTICLE OR DEVICE
701-0013-X001	Nitric Acid Plant No. 1 with Two Absorption Columns in Series with Catalytic Oxidizer --- 350 Tons of 100% Acid Per Day

In accordance with and subject to the provisions of the Alabama Air Pollution Control Act of 1971, as amended, **Code of Alabama 1975**, §§22-28-1 to 22-28-23 (the "AAPCA") and the Alabama Environmental Management Act, as amended, **Code of Alabama 1975**, §§22-22A-1 to 22-22A-15, and rules and regulations adopted thereunder, and subject further to the conditions set forth in this permit, the Permittee is hereby authorized to construct, install and use the equipment, device or other article described above.

ISSUANCE DATE: December 30, 1998

Alabama Department of Environmental Management

LAROCHE INDUSTRIES, INC.

Permit No. 701-0013-X001

1. This permit is issued on the basis of Rules and Regulations existing on the date of issuance. In the event additional Rules and Regulations are adopted, it shall be the permit holder's responsibility to comply with such rules.

2. This permit is not transferable. Upon sale or legal transfer, the new owner or operator must apply for a permit within 30 days.

3. A new permit application must be made for new sources, replacements, alterations or design changes which may result in the issuance of, or an increase in the issuance of, air contaminants, or the use of which may eliminate or reduce or control the issuance of air contaminants.

4. Each point of emission will be provided with sampling ports, ladders, platforms, and other safety equipment to facilitate testing performed in accordance with procedures established by Part 60 of Title 40 of the Code of Federal Regulations, as the same may be amended or revised.

5. In case of shutdown of air pollution control equipment for scheduled maintenance for a period greater than 2 hours, the intent to shut down shall be reported to the Department at least 24 hours prior to the planned shutdown.

6. All air pollution control devices and capture systems for which this permit is issued shall be maintained and operated at all times in a manner so as to minimize the emissions of air contaminants. Procedures for ensuring that the above equipment is properly operated and maintained so as to minimize the emission of air contaminants shall be established.

7. Submission of other reports regarding monitoring records, fuel analyses, operating rates, and equipment malfunctions may be required as authorized in the Department's air pollution control rules and regulations. The Department may require stack emission testing at any time.

8. Additions and revisions to the conditions of this Permit will be made, if necessary, to ensure that the Department's air pollution control rules and regulations are not violated.

9. Nothing in this permit or conditions thereto shall negate any authority granted to the Department pursuant to the Alabama Environmental Management Act or regulations issued thereunder.

10. Prior to a date to be specified by the Chief of the Air Division in the authorization to operate, emission tests are to be conducted by persons familiar with and using the EPA Sampling Train and Test Procedure as described in the Code of Federal Regulations, Title 40, Part 60, for the following pollutants. Written tests results are to be reported to the Department within 15 working days of completion of testing.

Particulates	( )	Carbon Monoxide	( )
Sulfur Dioxide	( )	Nitrogen Oxides	(X)*
Volatile Organic Compounds	( )	Visible Emissions	( )

* Stack emissions test and monitor certification

11. Emissions tests are to be conducted for the following pollutants at intervals not to exceed 24 months following the date of initial compliance testing. All test reports must be submitted to the Department within 15 days of completion of testing.

Particulates	( )	Carbon Monoxide	( )
Sulfur Dioxide	( )	Nitrogen Oxides	(X)*
Volatile Organic Compounds	( )		

* Stack emissions test and monitor certification

12. Precautions to prevent fugitive dust shall be taken so that provisions of the Department's rules and regulations shall not be violated.

13. This permit is issued with the condition that, should obnoxious odors arising from the plant operations be verified by Air Division inspectors, measures to abate the odorous emissions shall be taken upon a determination by the Alabama Department of Environmental Management that these measures are technically and economically feasible.

14. The Department must be notified in writing at least 10 working days in advance of all emission tests to be conducted and submitted as proof of compliance with the Department's air pollution control rules and regulations.

    To avoid problems concerning testing methods and procedures, the following shall be included with the notification letter:

    (1) The date the test crew is expected to arrive, the date and time anticipated of the start of the first run, how many and which sources are to be tested, and the names of the persons and/or testing company that will conduct the tests.

    (2) A complete description of each sampling train to be used, including type of media used in determining gas stream components, type of probe lining, type of filter media, and probe cleaning method and solvent to be used (if test procedure requires probe cleaning).

    (3) A description of the process(es) to be tested, including the feed rate, any operating parameter used to control or influence the operations, and the rated capacity.

    (4) A sketch or sketches showing sampling point locations and their relative positions to the nearest upstream and downstream gas flow disturbances.

    A pretest meeting may be held at the request of the source owner or the Department. The necessity for such a meeting and the required attendees will be determined on a case-by-case basis.

    All test reports must be submitted to the Department within 15 days of the actual completion of the test, unless an extension of time is specifically approved by the Department.

15. A continuous monitoring system for the measurement of nitrogen oxides shall be installed, calibrated, maintained, and operated by the owner or operator. The owner or operator shall establish a conversion factor for the purpose of converting the monitoring data into units of lbs/short ton. The conversion factor shall be established by measuring emissions with the continuous monitoring system concurrent with measuring emissions with the applicable reference method test.

16. Records will be maintained of the occurrence and duration of any startup, shutdown, or malfunction in the operation of the process equipment and any malfunction of the air pollution control equipment. These records will be kept in a permanent form suitable for inspection and will be retained for at least two years following the date of each occurrence. In the event there is a breakdown of air pollution control or process equipment in such a manner as to cause increased emission of air contaminants for a period greater than 2 hours, the person responsible for such equipment shall notify the Department within 24 hours and provide a statement giving all pertinent facts, including the duration of the breakdown. The Department shall be notified when the breakdown has been corrected.

17. All the original data charts, performance evaluations, calibration checks, adjustment and maintenance records and other information regarding monitoring system(s) will be maintained in a permanent form suitable for inspection. The file shall be retained for at least two years following the date of such measurements, maintenance, reports and records.

18. This unit shall not emit more to the atmosphere ang gases which contain nitrogen oxides, expressed as NO_2, in excess of 9.1 lbs/per ton of acid produced, the production being expressed as 100 percent (100%) nitric acid.

19. This unit shall not produce more than 130,000 tons in any consecutive 12-month period. Records of each month's production and the 12 month rolling total shall be compiled and maintained in a permanent form suitable and readily available for inspection. These records shall be retained for a period of two years form the date of compilation. A report of the 12-month rolling total shall be submitted quarterly beginning with July 1996.

20. A written report of excess emissions shall be submitted to the Department for every calendar year quarter. The requirements of these reports are specified under 40 CFR 60.7.

21. For the purpose of report required, periods of excess emissions that shall be reported are defined as any 3-hour period during which the average nitrogen oxides emissions (arithmetic average of three contiguous 1-hour periods) as measured by a continuous monitoring system exceed the standard.

December 30, 1998
Date

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ADEM

Alabama
Department of Environmental Management

AIR PERMIT

CC: WMG
GW
SBM
File - Original
R. Cowan

PERMITTEE: LAROCHE INDUSTRIES, INC.

LOCATION: CHEROKEE, ALABAMA

OLD ONE

PERMIT NUMBER	DESCRIPTION OF EQUIPMENT, ARTICLE OR DEVICE
701-0013-X001	Nitric Acid Plant No. 1 with Two (2) Absorption Columns in Series - 350 Tons of 100% Acid Per Day

Obsolete
12-30-95

*In accordance with and subject to the provisions of the Alabama Air Pollution Control Act of 1971, as amended, **Code of Alabama 1975**, §§22-28-1 to 22-28-23 (the "AAPCA") and the Alabama Environmental Management Act, as amended, **Code of Alabama 1975**, §§22-22A-1 to 22-22A-15, and rules and regulations adopted thereunder, and subject further to the conditions set forth in this permit, the Permittee is hereby authorized to construct, install and use the equipment, device or other article described above.*

ISSUANCE DATE: June 17, 1992

Alabama Department of Environmental Management

LAROCHE INDUSTRIES, INC.

Permit No. 701-0013-X001

1. This permit is issued on the basis of Rules and Regulations existing on the date of issuance. In the event additional Rules and Regulations are adopted, it shall be the permit holder's responsibility to comply with such rules.

2. This permit is not transferable. Upon sale or legal transfer, the new owner or operator must apply for a permit within 30 days.

3. A new permit application must be made for new sources, replacements, alterations or design changes which may result in the issuance of, or an increase in the issuance of, air contaminants, or the use of which may eliminate or reduce or control the issuance of air contaminants.

4. Each point of emission will be provided with sampling ports, ladders, platforms, and other safety equipment to facilitate testing performed in accordance with procedures established by Part 60 of Title 40 of the Code of Federal Regulations, as the same may be amended or revised.

5. In case of shutdown of air pollution control equipment for scheduled maintenance for a period greater than 2 hours, the intent to shut down shall be reported to the Department at least 24 hours prior to the planned shutdown.

6. In the event there is a breakdown of equipment in such a manner as to cause increased emission of air contaminants for a period greater than 2 hours, the person responsible for such equipment shall notify the Department within an additional 24 hours and provide a statement giving all pertinent facts, including the duration of the breakdown. The Department shall be notified when the breakdown has been corrected.

7. All air pollution control devices and capture systems for which this permit is issued shall be maintained and operated at all times in a manner so as to minimize the emissions of air contaminants. Procedures for ensuring that the above equipment is properly operated and maintained so as to minimize the emission of air contaminants shall be established.

8. Submission of other reports regarding monitoring records, fuel analyses, operating rates, and equipment malfunctions may be required as authorized in the Department's air pollution control rules and regulations. The Department may require stack emission testing at any time.

9. Additions and revisions to the conditions of this Permit will be made, if necessary, to ensure that the Department's air pollution control rules and regulations are not violated.

10. Nothing in this permit or conditions thereto shall negate any authority granted to the Department pursuant to the Alabama Environmental Management Act or regulations issued thereunder.

11. Prior to a date to be specified by the Chief of the Air Division in the authorization to operate, emission tests are to be conducted by persons familiar with and using the EPA Sampling Train and Test Procedure as described in the Code of Federal Regulations, Title 40, Part 60, for the following pollutants. Written tests results are to be reported to the Department within 15 working days of completion of testing.

Particulates	( )	Carbon Monoxide	( )*
Sulfur Dioxide	( )	Nitrogen Oxides	(X)*
Volatile Organic Compounds	( )		

* stack emissions test and monitor certification

12. Emissions tests are to be conducted for the following pollutants at intervals not to exceed 24 months following the date of initial compliance testing. All test reports must be submitted to the Department within 15 days of completion of testing.

Particulates	( )	Carbon Monoxide	( )*
Sulfur Dioxide	( )	Nitrogen Oxides	(X)*
Volatile Organic Compounds	( )		

* stack emissions test and monitor certification

13. The Department must be notified in writing at least 10 working days in advance of all emission tests to be conducted and submitted as proof of compliance with the Department's air pollution control rules and regulations.

    To avoid problems concerning testing methods and procedures, the following shall be included with the notification letter:

    (1) The date the test crew is expected to arrive, the date and time anticipated of the start of the first run, how many and which sources are to be tested, and the names of the persons and/or testing company that will conduct the tests.

    (2) A complete description of each sampling train to be used, including type of media used in determining gas stream components, type of probe lining, type of filter media, and probe cleaning method and solvent to be used (if test procedure requires probe cleaning).

    (3) A description of the process(es) to be tested, including the feed rate, any operating parameter used to control or influence the operations, and the rated capacity.

    (4) A sketch or sketches showing sampling point locations and their relative positions to the nearest upstream and downstream gas flow disturbances.

A pretest meeting may be held at the request of the source owner or the Department. The necessity for such a meeting and the required attendees will be determined on a case-by-case basis.

All test reports must be submitted to the Department within 15 days of the actual completion of the test, unless an extension of time is specifically approved by the Department.

14. A continuous monitoring system for the measurement of nitrogen oxides shall be installed, calibrated, maintained, and operated by the owner or operator. The owner or operator shall establish a conversion factor for the purpose of converting monitoring data into units of lbs/short ton. The conversion factor shall be established by measuring emissions with the continuous monitoring system concurrent with measuring emissions with the applicable reference method test.

15. All the original data charts, performance evaluations, calibration checks, adjustment and maintenance records and other information regarding monitoring system(s) will be maintained in a permanent form suitable for inspection. The file shall be retained for at least two years following the date of such measurements, maintenance, reports and records.

16. The owner or operator shall record the daily production rate and hours of operation. Records must be kept in permanent form suitable for inspection. The records shall be retained for at least two years and made available upon request.

17. This unit shall not emit to the atmosphere any gases which contain nitrogen oxides, expressed as NO_2, in excess of 20.0 lbs/per ton of acid produced, the production being expressed as 100 percent (100%) nitric acid.

18. Use of this nitric acid plant shall be limited to 59,140 tons of 100 percent (100%) nitric acid production in any 12 consecutive month period. A summary of operations data shall be submitted with each quarterly excess emissions report.

19. A written report of excess emissions shall be submitted to the Department for every calendar year quarter. The requirements of these reports are specified under 40 CFR 60.7.

20. For the purpose of report required, periods of excess emissions that shall be reported are defined as any 3-hour period during which the average nitrogen oxides emissions (arithmetic average of three contiguous 1-hour periods) as measured by a continuous monitoring system exceed the standard.

June 17, 1992
Date

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ADEM

ALABAMA
DEPARTMENT OF ENVIRONMENTAL MANAGEMENT

AIR PERMIT

PERMITTEE: LAROCHE INDUSTRIES, INC.

LOCATION: CHEROKEE, ALABAMA

PERMIT NUMBER	DESCRIPTION OF EQUIPMENT, ARTICLE OR DEVICE
701-0013-X001	Nitric Acid Plant No. 1 - 350 Tons Per Day 100% Acid

Obsolete 6-17-92

In accordance with and subject to the provisions of the Alabama Air Pollution Control Act of 1971, as amended, ***Code of Alabama 1975****, §§ 22-28-1 to 22-28-23 (the "AAPCA") and the Alabama Environmental Management Act, as amended,* ***Code of Alabama 1975****, §§ 22-22A-1 to 22-22A-15, and rules and regulations adopted thereunder, and subject further to the conditions set forth in this permit, the Permittee is hereby authorized to construct, install and use the equipment, device or other article described above.*

ISSUANCE DATE: August 12, 1991 See June 17, 92 revision

Alabama Department of Environmental Management

LaRoche Industries Inc.

County Road 25
Cherokee, Alabama 35616

ENSR®

Revision 1 to
Title V Operating
Air Permit Application

ENSR Corporation
November 1999
Document Number 4176-006

LaRoche Industries Inc.

County Road 25
Cherokee, Alabama 35616

Revision 1 to
Title V Operating
Air Permit Application

ENSR Corporation
November 1999
Document Number 4176-006

CONTENTS

CONTENTS (Cont'd)

LIST OF FIGURES

1.0 INTRODUCTION

This application for a major source operating permit is submitted by LaRoche Industries Inc. for its nitrogenous fertilizer manufacturing facility located near Cherokee, Alabama. This application is intended to fulfill the operating permit requirements promulgated by ADEM Administrative Code R 335-3-16. The information reflects current and future operations as well as practices and programs undertaken to comply with new and anticipated requirements.

1.1 Background

Production of nitrogenous and phosphatic fertilizers began in the Cherokee facility in the early 1960s under the name of Armour Agricultural Chemicals. It was acquired by U.S. Steel in 1968 and operated as part of U.S.S. Agrichemicals until 1986. In 1986 the facility was purchased by LaRoche Industries Inc., a national agriculture chemicals corporation. In 1994, production of phosphatic fertilizers was discontinued, and the plant now manufactures nitrogenous fertilizers (SIC 2873) exclusively.

Products from the facility include:

- Anhydrous ammonia,
- Ammonium hydroxide (Aqua ammonia),
- Nitric acid,
- Ammonium nitrate prills,
- Ammonium nitrate solution,
- Ammonia-ammonium nitrate solution, and
- Urea ammonium nitrate solution.

Plant activities are performed in distinct production units and can be categorized as follows:

- One ammonia plant,
- Two nitric acid plants,
- One ammonium nitrate plant,
- One urea plant, and
- One utility area with one boiler.

1.2 Application Organization

The above listed activities are organized into separate sections of this application. Each section contains a process description, a process flow diagram and applicable ADEM forms. Calculations for all forms are provided in Appendix A.

This application is intended to describe the LaRoche Industries Inc. Cherokee Plant as mandated by the Title V requirements for the next five years.

1.3 Alternate Operating Scenarios

LaRoche Industries, Inc. is presenting a single operating scenario as defined by the process description for each production unit as described in this application.

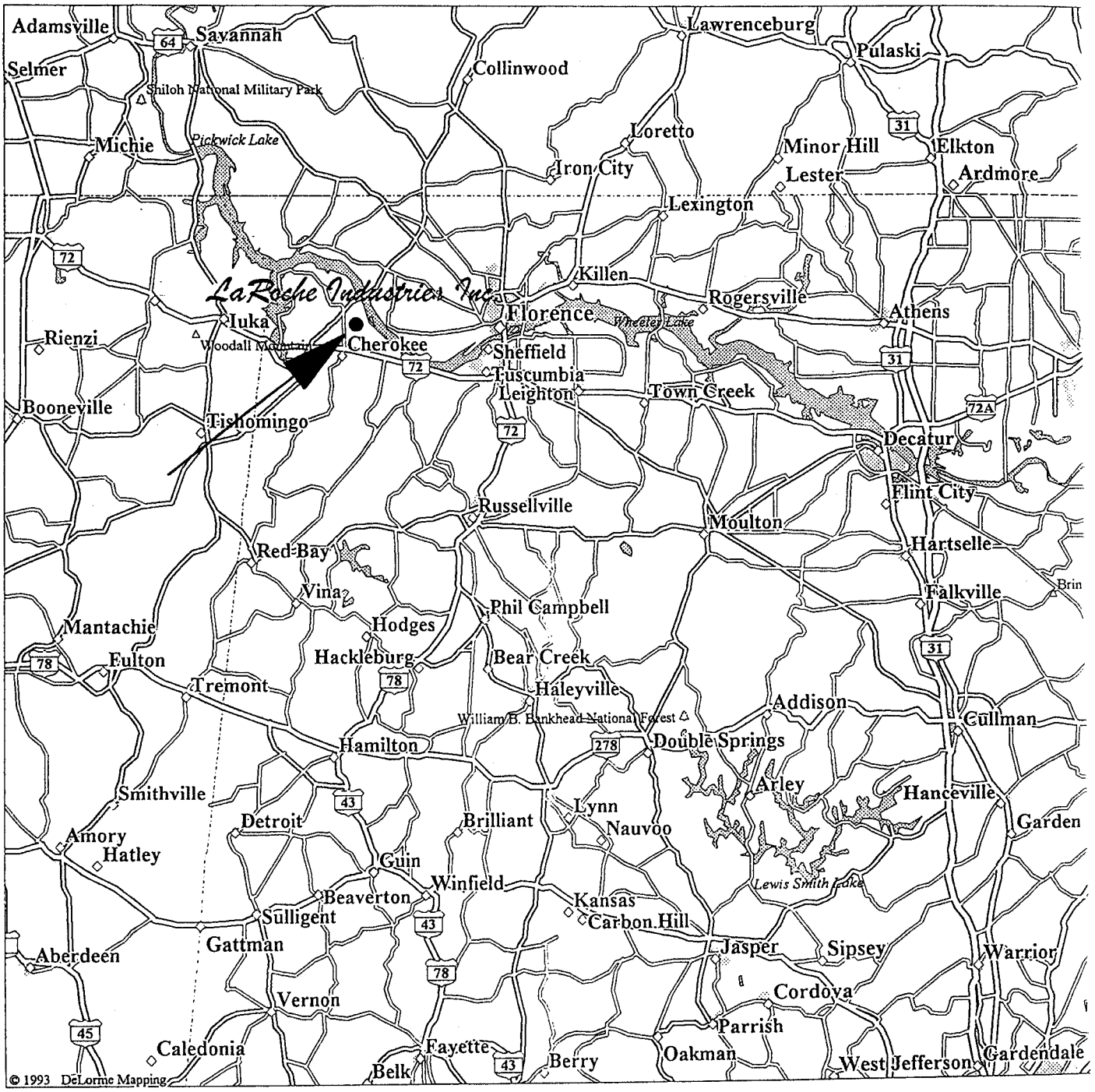
1.4 Emissions Calculations

The emissions information has been prepared so as to take advantage of much of the streamlining authorized under EPA's White Paper No. 1. Accordingly, the emissions information consists of estimates derived from available information. It should be understood that all methods for determining emissions contain inherent uncertainties, whether the method involves emission factors, engineering calculations, emissions modeling, manufacturers' specifications, stack tests, and/or mass balance calculations. For insignificant and trivial activities, no emissions information is included. Where insignificant activities are based on a size or production rate cutoff, a list of such activities is provided.

The emissions estimates in this application are provided solely to comply with the Part 70 requirement to provide emissions information. In accordance with White Paper No. 1, these estimates do not constitute applicable requirements or federally enforceable Part 70 permit terms. Moreover, the estimates are not to be used directly or indirectly to establish any new limits in the Part 70 permit.

Please note that since the original application was submitted in 1997, some sections of AP-42 have been revised. In particular, AP-42 Sections 1.3 (Fuel Oil Combustion) and 1.4 (Natural Gas Combustion) have been revised in Supplements E and D, respectively. Those changes are reflected in emissions estimates which were based on the applicable AP-42 emission factors.

1.5 Locator Maps



LEGEND

- Population Center
- Town, Small City
- Large City
- Hill
- Park
- US Highway
- State/Prov Boundary
- Major Street/Road
- State Route
- Interstate Highway
- US Highway
- Land Mass
- Open Water

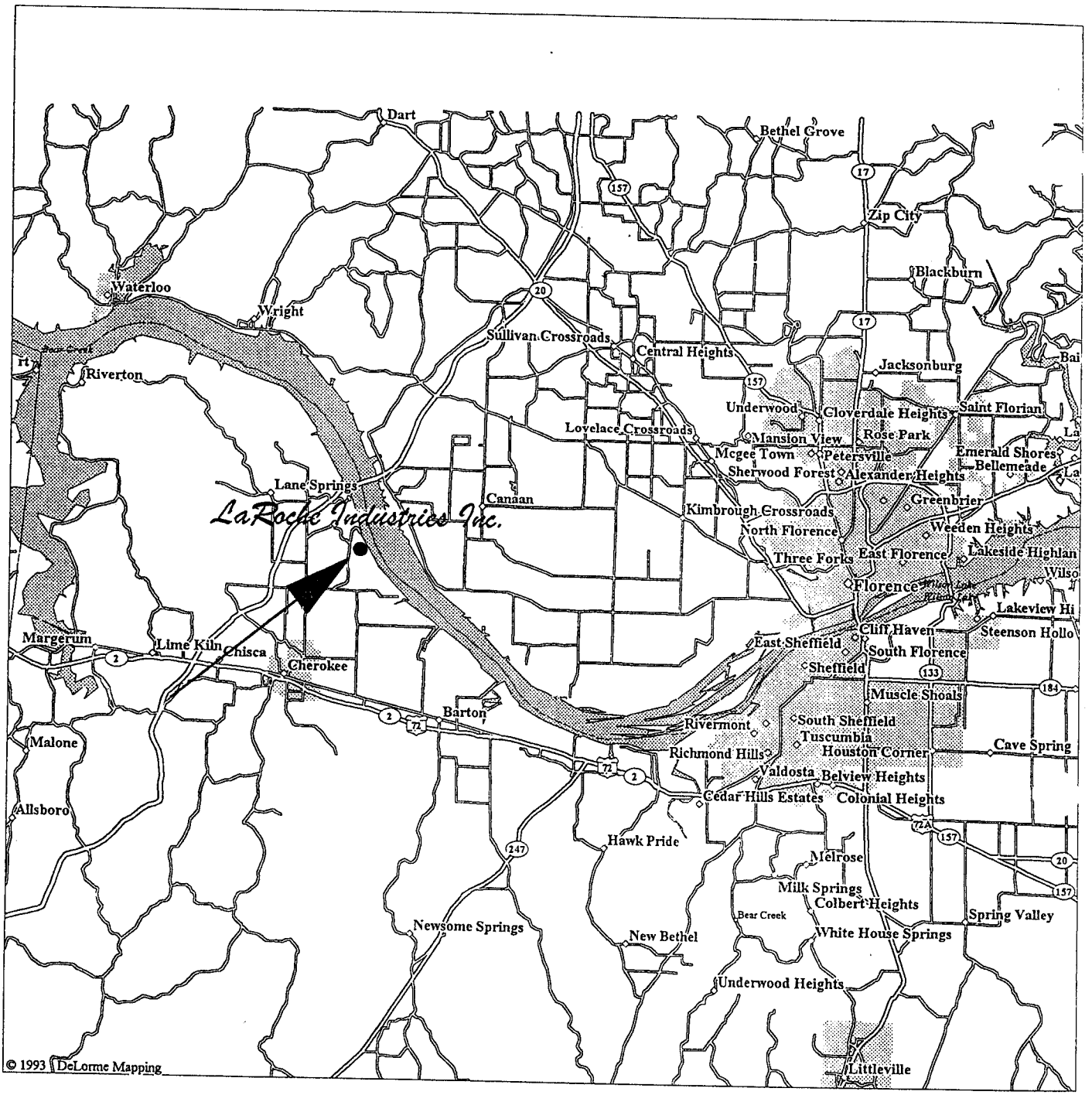
Scale 1:900,000 (at center)

20 Miles

20 KM

LaRoche Industries Inc.
Mag 9.00
Wed Feb 26 09:27:28 1997

Figure 1-1
Locator Map A
LaRoche Industries Inc.



LEGEND

- Population Center
- State Route
- Geo Feature
- Town, Small City
- Large City
- US Highway
- County Boundary
- Major Street/Road
- State Route
- Interstate Highway
- US Highway
- Land Mass
- Open Water

Scale 1:250,000 (at center)

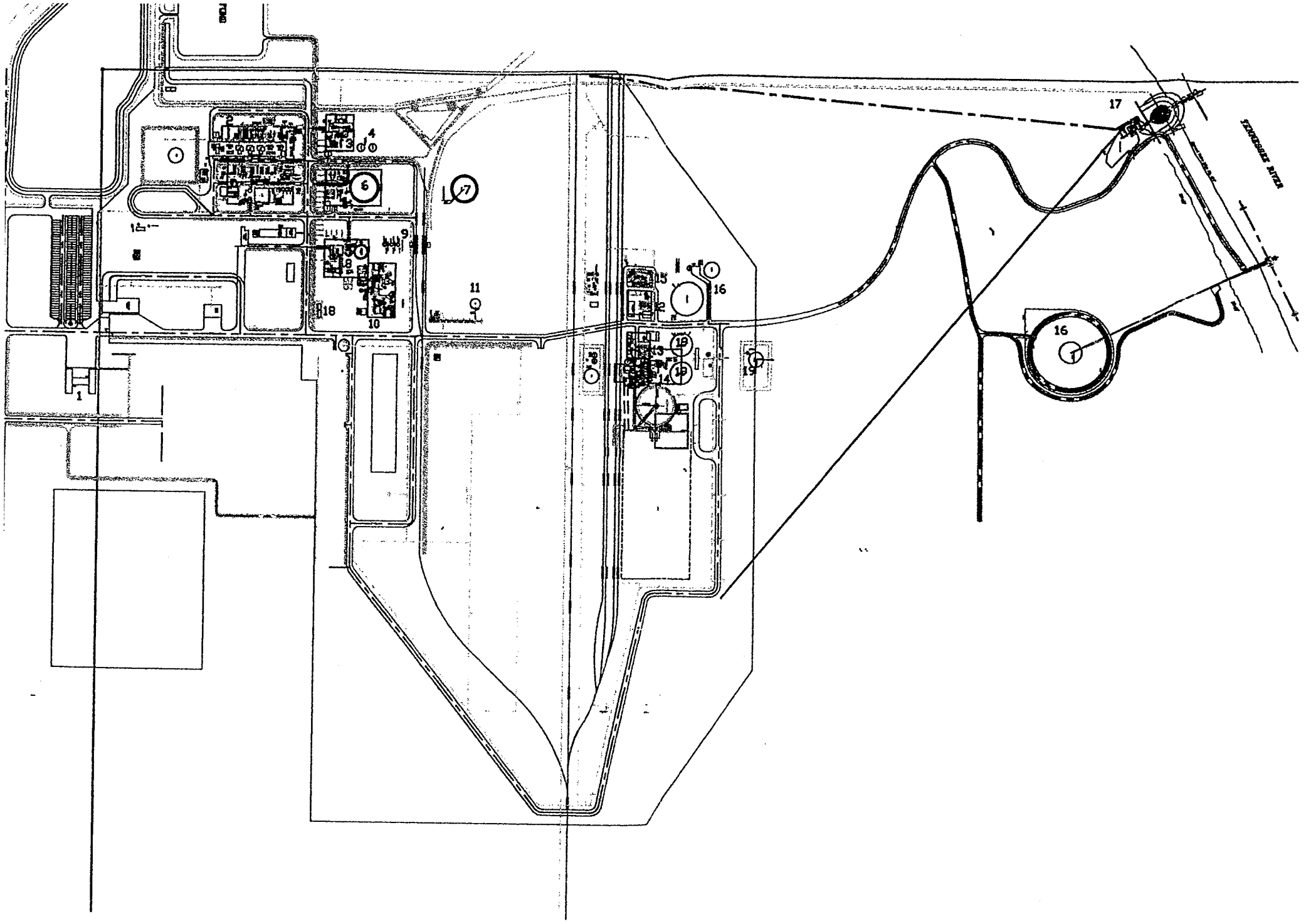
5 Miles

5 KM

LaRoche Industries Inc.
Mag 11.24
Wed Feb 26 09:31:27 1997

Figure 1-2
Locator Map B
LaRoche Industries Inc.

1.6 Facility Plot Plan and Overall Process Flow Diagram



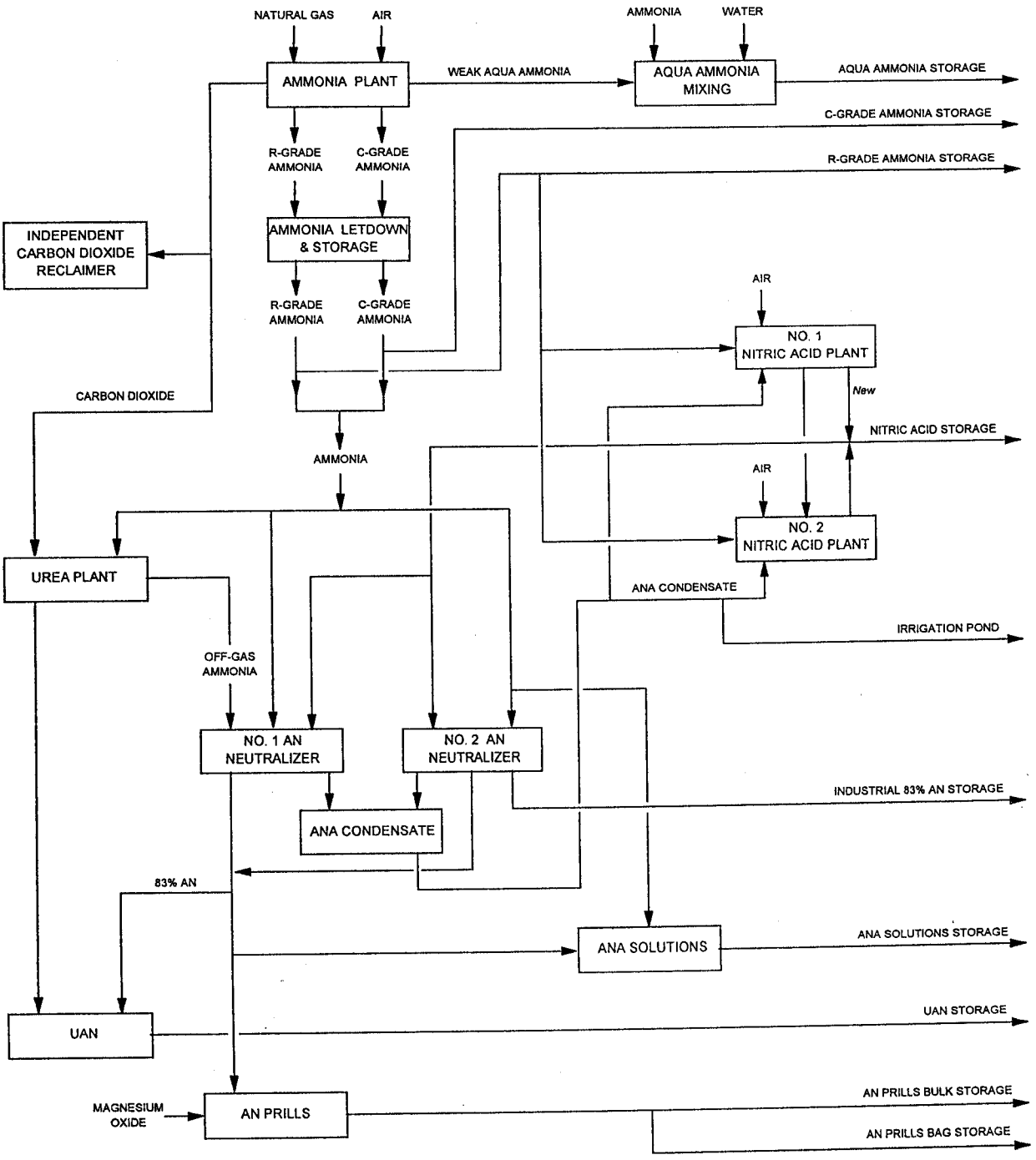
Notes:

Confidential

This drawing is the exclusive property of LaRoche Industries Inc.. Its acceptance constitutes an agreement that it shall be treated as strictly confidential. Its use is restricted to those

LAROCHE INDUSTRIES INC.

Design By:	
	00/00/97
Drawn By:	
C. Kyser	11/11/97



ENSR

Figure 1-4
Process Flow Diagram
Overall Facility
LaRoche Industries Inc. - Cherokee Plant

Drawn by: GAM / KWF	Date: 6/3/97	PROJECT NO.	REV.
File No.: PFD2.PRE	Revised: 05/27/99	4176-004	3

1.7 ADEM 103 Facility Identification Form

ALABAMA DEPARTMENT OF ENVIRONMENTAL MANAGEMENT
AIR DIVISION

Facility Number | | | | - | | | | |

Do not Write in This Space

OPERATING PERMIT APPLICATION
FACILITY IDENTIFICATION FORM

1. Name of Firm or Institution: LaRoche Industries Inc.

Facility Location

Street & Number County Road 25

City Cherokee **County** Colbert **Zip** 35616

2. Name of Owner: LaRoche Industries Inc.

Owner's Address

Street & Number 1100 Johnson Ferry Road

City Atlanta **State** Georgia **Zip** 30342

Plant Owner's Telephone Number: 404/851-0300

3. Name of Responsible Official: Don M. Phillips, Cherokee Plant Manager

Responsible Official's Address

Street & Number County Road 25 (Mailing Address: P.O. Box 250)

City Cherokee **State** Alabama **Zip** 35616

Responsible Official's Telephone Number: 205/359-7222

4. Name of Plant Contact: Don M. Phillips

Title of Contact: Plant Manager

Plant Contact's Telephone Number: 256/359-7222

5. UTM Coordinates: 414.3 E 3852.0 N

6. Permit application is made for:

[X] Existing source (initial application)

[ ] Modification

[ ] New source (to be constructed)

[ ] Change of ownership

[ ] Change of location

[ ] Other (specify)

[ ] Existing source (permit renewal)

If application is being made to construct or modify, please provide the name and address of installer or contractor

N/A

Telephone

Date construction/modification to begin to be completed

7. Permit application is being made to obtain the following type permit:

[ ] Air permit

[X] Major source operating permit

[ ] Synthetic minor source operating permit

[ ] General permit

8. Indicate the number of each of the following forms attached and made a part of this application: (if a form does not apply to your operation indicate "N/A" in the space opposite the form). Multiple forms may be used as required.

1	ADEM 104 - INDIRECT HEATING EQUIPMENT
5	ADEM 105 - MANUFACTURING OR PROCESSING OPERATION
1	ADEM 106 - REFUSE HANDLING, DISPOSAL, AND INCINERATION
N/A	ADEM 107 - STATIONARY INTERNAL COMBUSTION ENGINES
N/A	ADEM 108 - LOADING, STORAGE & DISPENSING LIQUID & GASEOUS ORGANIC COMPOUNDS
N/A	ADEM 109 - VOLATILE ORGANIC COMPOUND SURFACE COATING EMISSION SOURCES
4	ADEM 110 - AIR POLLUTION CONTROL DEVICE
N/A	ADEM 111 - COAL PREPARATION FACILITY
N/A	ADEM 112 - SOLVENT METAL CLEANING
2	ADEM 113 - CONTINUOUS EMISSION MONITORS
N/A	ADEM 114 - COMPLIANCE SCHEDULE

9. General nature of business: (describe and list appropriate standard industrial classification (SIC) code(s)):

Engaged in manfacturing nitrogenous fertilizer materials: SIC Code 2873

10. For those making application for a synthetic minor or major source operating permit, please summarize each pollutant emitted and the emission rate for the pollutant. Indicate those pollutants for which the facility is major.

Regulated pollutant	Potential Emissions* (tons/year)	Major source? yes/no
Criteria:		
Particulates	87.9	No
Sulfur dioxide	7.3	No
Nitrogen oxides	1,284	Yes
Carbon monoxide	1,512	Yes
Volatile organic compounds	685	Yes
HAPS:		
Formaldehyde	0.03	No
All other HAPs (each)	<0.03	No
Other:		
Ammonia	47.8	NA
Nitric Acid	37.8	NA

*Potential emissions are either the maximum allowed by the regulations or by permit, or, if there is no regulatory limit, it is the emissions that occur from continuous operation at maximum capacity.

Summary of Potential Emissions

EU No.	Emission Unit	Emissions, Tons per Year CO	SO2	VOC	NOx	PM/PM10	NH3	HNO3	HAP*	Ref.
	Synthetic Ammonia Plant									AP-42
	Desulfurization Unit A-1	1,300.00	5.41	677.00						
	Primary reformer A-2	106.00	0.76	6.94	353.00	9.59				AP-42 Sup D
	Fugitive (Irrigation Pond)						13.80			
X001	No. 1 Nitric Acid	72.70			591.00					Permit, Mat. Bal.
X023	No. 2 Nitric Acid				324.00		34.00			NSPS
	No. 1 Neutralizer					8.13		37.80		AP-42
X019	Prilling					67.00				Permit
	97.6 MMBtu Boiler	32.75	1.12	1.29	16.16	3.21			0.03	AP-42 Sup D, E, Permit
TOTALS		**1,511.5**	**7.3**	**685.2**	**1,284.2**	**87.9**	**47.8**	**37.8**	**0.0**	

*HAP: Factors for Fuel Oil and Natural Gas combustion in AP-42 suggest various HAPs may be emitted from the boiler. The highest single HAP emissions are shown here, for formaldehyde.

11. For those applying for a major source operating permit, indicate the compliance status by program for each emission unit or source and the method used to determine compliance. Also cite the specific applicable requirement.

Emission unit or source: General Facility
(description)

Pollutant[4]	Standard	Program[1]	Method used to determine compliance	Compliance Status	
				IN[2]	OUT[3]
Asbestos	EPA Program	NESHAPS 40 CFR 61 Subpart M	LaRoche compliance program	X	
Ammonia (anhydrous)	EPA Program	40 CFR 68 112(r)	Record Keeping	X	
Ammonia (aqua >20%)	EPA Program	40 CFR 68 112(r)	Record Keeping	X	
Chlorine	EPA Program	40 CFR 68 112(r)	Record Keeping	X	
Sulfur Dioxide	EPA Program	40 CFR 68 112(r)	Record Keeping	X	
Ozone Depleting Substances	EPA Program	Title VI	LaRoche compliance program	X	

[1]PSD, non-attainment NSR, NSPS, NESHAP (40 CFR Part 61), NESHAP (40 CFR Part 63), accidental release (112(r)),SIP regulation, Title IV, Enhanced Monitoring, Title VI, Other (specify)
[2]Attach compliance plan
[3]Attach compliance schedule (ADEM Form-114)
[4]Fugitive emissions must be included as separate entries

11. For those applying for a major source operating permit, indicate the compliance status by program for each emission unit or source and the method used to determine compliance. Also cite the specific applicable requirement.

Emission unit or source: Ammonia Plant - 288 MM BTU/Hr Primary Reformer
(description)

Pollutant[4]	Standard	Program[1]	Method used to determine compliance	Compliance Status	
				IN[2]	OUT[3]
Particulates	1.38(Heat Input)$^{-0.44}$	ADEM Regulation 335-3-4-.03(1)	Engineering Calculation	X	
Particulates	20% Opacity	ADEM Regulation 335-3-4-.01	See Compliance Plan	X	
Sulfur Dioxide	4.0 lb/MM BTU Heat Input	ADEM Regulation 335-3-5-.01(b)	Fuel Limited to Natural Gas	X	

[1]PSD, non-attainment NSR, NSPS, NESHAP (40 CFR Part 61), NESHAP (40 CFR Part 63), accidental release (112(r)),SIP regulation, Title IV, Enhanced Monitoring, Title VI, Other (specify)
[2]Attach compliance plan
[3]Attach compliance schedule (ADEM Form-114)
[4]Fugitive emissions must be included as separate entries

11. For those applying for a major source operating permit, indicate the compliance status by program for each emission unit or source and the method used to determine compliance. Also cite the specific applicable requirement.

Emission unit or source: No. 1 Nitric Acid Plant
(description)

Pollutant[4]	Standard	Program[1]	Method used to determine compliance	Compliance Status	
				IN[2]	OUT[3]
Nitrogen Oxides	9.1 Lbs/Ton of Acid Produced	Permit X001	Continuous Emission Monitor	X	
Nitrogen Oxides	No more than 130,000 tons of 100% nitric acid production in any 12 consecutive months	Permit X001	See compliance plan.	X	

[1]PSD, non-attainment NSR, NSPS, NESHAP (40 CFR Part 61), NESHAP (40 CFR Part 63), accidental release (112(r)),SIP regulation, Title IV, Enhanced Monitoring, Title VI, Other (specify)
[2]Attach compliance plan
[3]Attach compliance schedule (ADEM Form-114)
[4]Fugitive emissions must be included as separate entries

11. For those applying for a major source operating permit, indicate the compliance status by program for each emission unit or source and the method used to determine compliance. Also cite the specific applicable requirement.

Emission unit or source: No. 2 Nitric Acid Plant
(description)

Pollutant[4]	Standard	Program[1]	Method used to determine compliance	Compliance Status	
				IN[2]	OUT[3]
Nitrogen Oxides	3.0 Lb/Ton of 100% HNO_3 Produced	NSPS Subpart G	Continuous Emission monitor	X	
Nitrogen Oxides	10% Opacity	NSPS Subpart G	See Compliance Plan	X	
Nitrogen Oxides	Record Keeping and Reporting	NSPS Subpart G	See Compliance Plan	X	

[1]PSD, non-attainment NSR, NSPS, NESHAP (40 CFR Part 61), NESHAP (40 CFR Part 63), accidental release (112(r)),SIP regulation, Title IV, Enhanced Monitoring, Title VI, Other (specify)
[2]Attach compliance plan
[3]Attach compliance schedule (ADEM Form-114)
[4]Fugitive emissions must be included as separate entries

11. For those applying for a major source operating permit, indicate the compliance status by program for each emission unit or source and the method used to determine compliance. Also cite the specific applicable requirement.

Emission unit or source: Number 1 Neutralizer
(description)

Pollutant[4]	Standard	Program[1]	Method used to determine compliance	Compliance Status	
				IN[2]	OUT[3]
Particulates	17.31(Process Weight)$^{0.16}$	ADEM Regulation 335-3-4-.04(1)	The work practice of effective operation and maintenance of the attached scrubber.	X	
Particulates	20% Opacity [5]	ADEM Regulation 335-3-4-.01	See Compliance Plan	X	

[1]PSD, non-attainment NSR, NSPS, NESHAP (40 CFR Part 61), NESHAP (40 CFR Part 63), accidental release (112(r)),SIP regulation, Title IV, Enhanced Monitoring, Title VI, Other (specify)
[2]Attach compliance plan
[3]Attach compliance schedule (ADEM Form-114)
[4]Fugitive emissions must be included as separate entries
[5] Unless there is an approved exception as provided in ADEM 335-3-4-.01(1)(d).

11. For those applying for a major source operating permit, indicate the compliance status by program for each emission unit or source and the method used to determine compliance. Also cite the specific applicable requirement.

Emission unit or source: Ammonium Nitrate Prilling Unit
(description)

Pollutant[4]	Standard	Program[1]	Method used to determine compliance	Compliance Status	
				IN[2]	OUT[3]
Particulates	0.79 Lb/Ton of Production	Permit X019	The work practice of effective operation and maintenance of the two attached scrubbers.	X	
Particulates	20% Opacity [5]	ADEM Regulation 335-3-4-.01	See Compliance Plan	X	

[1]PSD, non-attainment NSR, NSPS, NESHAP (40 CFR Part 61), NESHAP (40 CFR Part 63), accidental release (112(r)),SIP regulation, Title IV, Enhanced Monitoring, Title VI, Other (specify)
[2]Attach compliance plan
[3]Attach compliance schedule (ADEM Form-114)
[4]Fugitive emissions must be included as separate entries
[5] Unless there is an approved exception as provided in ADEM 335-3-4-.01(1)(d).

11. For those applying for a major source operating permit, indicate the compliance status by program for each emission unit or source and the method used to determine compliance. Also cite the specific applicable requirement.

Emission unit or source: 97.6 MM BTU/Hr Start-Up Boiler
(description)

Pollutant[4]	Standard	Program[1]	Method used to determine compliance	Compliance Status	
				IN[2]	OUT[3]
Particulates	1.38(Heat Input)$^{-0.44}$	ADEM Regulation 335-3-4-.03(1)	Engineering Calculation	X	
Particulates	20% Opacity	NSPS Subpart Dc	See Compliance Plan	X	
Sulfur Dioxide	1.2 Lb/MM BTU of Heat Input	NSPS Subpart Dc	Fuel Limited to Natural Gas and No. 2 Fuel Oil	X	

[1]PSD, non-attainment NSR, NSPS, NESHAP (40 CFR Part 61), NESHAP (40 CFR Part 63), accidental release (112(r)),SIP regulation, Title IV, Enhanced Monitoring, Title VI, Other (specify)
[2]Attach compliance plan
[3]Attach compliance schedule (ADEM Form-114)
[4]Fugitive emissions must be included as separate entries

12. List all insignificant activities and the basis for listing them as such (i.e., less than the insignificant activity thresholds or on the list of insignificant activities). Attach any documentation needed, such as calculations. No unit subject to an NSPS, NESHAP or MACT standard can be listed as insignificant.

Insignificant Activity	Basis
Ammonia Plant Emergency Vent on HTSC Guard Chamber	ADEM 335-3-16-.01 (o)
Ammonia Plant Start-up Vent after LTSC	ADEM 335-3-16-.01 (o)
Ammonia Plant Emergency Vent at Methanator Inlet	ADEM 335-3-16-.01 (o)
Ammonia Plant Emergency Vent at Carbon Dioxide Stripper	ADEM 335-3-16-.01 (o)
Pressure Relief Vent on R-Grade Ammonia Storage Tank	ADEM 335-3-16-.01 (o)
Pressure Relief Vent on C-Grade Ammonia Storage Tank	ADEM 335-3-16-.01 (o)
Ammonia Plant Nat. Gas Fired Startup Heater (4 MM BTU/hr)	T&I List, Section 2, A(1)
Ammonia Plant Nat. Gas Fired Startup Heater (7.28 MM BTU/hr)	ADEM 335-3-16-.01 (o)
No. 1 Nitric Acid Plant Start-up Vent	ADEM 335-3-16-.01 (o)
No. 1 Nitric Acid Storage Tanks (2)	ADEM 335-3-16-.01 (o)
No. 2 Nitric Acid Plant Start-up Vent	ADEM 335-3-16-.01 (o)
Nat. Gas Fired Steam Superheater (4 MM BTU/hr)	T&I List, Section 2, A(1)
No. 2 Nitric Acid Storage Tank	ADEM 335-3-16-.01 (o)
Urea Plant Hotwell Scrubber	ADEM 335-3-16-.01 (o)
Ammonium Nitrate Prill Unit Neutralizer Condenser Vent	ADEM 335-3-16-.01 (o)
99.8% Ammonium Nitrate Evaporator Start-up Vent	ADEM 335-3-16-.01 (o)
93% Ammonium Nitrate Evaporator Vent	ADEM 335-3-16-.01 (o)
83% Ammonium Nitrate Storage Tank Vent	ADEM 335-3-16-.01 (o)
Magnesium Oxide Storage Silo Vent (2,020 c.f. Z007)	ADEM 335-3-16-.01 (o)
Ammonium Nitrate Prill Bulk Storage	ADEM 335-3-16-.01 (o)
Ammonium Nitrate Prill Loading	ADEM 335-3-16-.01 (o)
Ammonium Nitrate Prill Bagging	ADEM 335-3-16-.01 (o)
Urea Ammonium Nitrate Preparation, Storage and Loading	ADEM 335-3-16-.01 (o)
No. 2 - 83% Ammonium Nitrate Neutralizer	ADEM 335-3-16-.01 (o)
Ammonia Pressure Solution Preparation and Associated Loading	ADEM 335-3-16-.01 (o)
Urea Plant and Associated Storage and Loading	ADEM 335-3-16-.01 (o)
Ammonia Letdown Area and Associated Loading	ADEM 335-3-16-.01 (o)
Ammonia Still	ADEM 335-3-16-.01 (o)
Aqua Ammonia Area and Associated Loading	ADEM 335-3-16-.01 (o)
Barge Loading Operation to Include Hopper and Covered Conveyor	ADEM 335-3-16-.01 (o)
River Water Pumping Area	ADEM 335-3-16-.01 (o)
Chlorine Cylinder Handling, Connecting and Disconnecting	ADEM 335-3-16-.01 (o)
Laboratory	T&I List, Section 2, F
Sulfur Dioxide Cylinder Handling, Connecting and Disconnecting	ADEM 335-3-16-.01 (o)

13. List and explain any exemptions from applicable requirements the facility is claiming:

a. No exemptions are claimed.

b.

c.

d.

e.

f.

g.

h.

i.

14. List below other attachments that are a part of this application(all supporting engineering calculations must be appended):

a. Calculations are in Appendix A.

b. Compliance Plan is in Appendix B.

c.

d.

e.

f.

g.

h.

i.

I CERTIFY UNDER PENALTY OF LAW THAT, BASED ON INFORMATION AND BELIEF FORMED AFTER REASONABLE INQUIRY, THE STATEMENTS AND INFORMATION CONTAINED IN THIS APPLICATION ARE TRUE, ACCURATE AND COMPLETE.

I ALSO CERTIFY THAT THE SOURCE WILL CONTINUE TO COMPLY WITH APPLICABLE REQUIREMENTS FOR WHICH IT IS IN COMPLIANCE, AND THAT THE SOURCE WILL, IN A TIMELY MANNER, MEET ALL APPLICABLE REQUIREMENTS THAT WILL BECOME EFFECTIVE DURING THE PERMIT TERM AND SUBMIT A DETAILED SCHEDULE, IF NEEDED FOR MEETING THE REQUIREMENTS.

12/16/99

SIGNATURE OF RESPONSIBLE OFFICIAL DATE

1.8 ADEM Form 106 for Waste Disposal

PERMIT APPLICATION
FOR
WASTE DISPOSAL

				-					-				

Do not write in this space

SECTION I

1. Name of firm or organization: LaRoche Industries Inc. - Cherokee Plant

2. Type and quantity of waste generated:

Type waste	Quantity - tons/yr	Disposal method code*
Paper		
Cardboard		
Wood	20	(5)
Plastic		
Rubber		
Gaseous		
Liquid (Waste oil)	30	(5)
Pathological		
Incombustibles	50	(3)
Garbage	1,400	(3)
Other: (Asbestos containing material)	90	(3)

* method codes

(1) incineration

(2) company operated on-site disposal

(3) commercial disposal service

(4) hauled by source to separate disposal site

(5) sold or otherwise transferred to another source for reclaiming or recycling

(6) other (specify)

---

3. Do the methods used for disposing of waste comply with all applicable air pollution rules and regulations?

[X] yes [ ] no

(if "no", a compliance schedule, form ADEM-114, must be completed and attached.)

SECTION II

If waste disposal is by incineration, please complete the following: N/A

1. Incinerator manufacturer's information:

   a. Name of manufacturer _____

   b. Model number _____

   c. Rated capacity (specify units) _____

   d. Check type of waste (see final page for definitions of waste types)

   ☐Type 0 ☐Type 1 ☐Type 2 ☐Type 3 ☐Type 4 ☐Type 5 ☐Type 6

2. Type of incinerator (check all applicable):

   [ ] Single chamber [ ] Multiple chamber

   [ ] Other (specify) _____

3. Auxiliary equipment (check all applicable):

   [ ] Primary burner Fuel _____ (type)

   [ ] Secondary burner Fuel _____ (type)

4. Combustion air

   [ ] Natural draft [ ] Starved air [ ] Induced draft [ ] Forced draft

   [ ] Other _____ (specify)

5. Have tests been performed on this model incinerator?

   [ ] yes [ ] no if yes, attach copy of report

6. Waste feed method:

   [ ] Fuel fed [ ] Continuous direct

   [ ] Chute fed [ ] Batch direct

LAROCHE INDUSTRIES, INC.

Permit No. 701-0013-X001

1. This permit is issued on the basis of Rules and Regulations existing on the date of issuance. In the event additional Rules and Regulations are adopted, it shall be the permit holder's responsibility to comply with such rules.

2. This permit is not transferable. Upon sale or legal transfer, the new owner or operator must apply for a permit within 30 days.

3. A new permit application must be made for new sources, replacements, alterations or design changes which may result in the issuance of, or an increase in the issuance of, air contaminants, or the use of which may eliminate or reduce or control the issuance of air contaminants.

4. Each point of emission will be provided with sampling ports, ladders, platforms, and other safety equipment to facilitate testing performed in accordance with procedures established by Part 60 of Title 40 of the Code of Federal Regulations, as the same may be amended or revised.

5. In case of shutdown of air pollution control equipment for scheduled maintenance for a period greater than 2 hours, the intent to shut down shall be reported to the Department at least 24 hours prior to the planned shutdown.

6. In the event there is a breakdown of equipment in such a manner as to cause increased emission of air contaminants for a period greater than 2 hours, the person responsible for such equipment shall notify the Department within an additional 24 hours and provide a statement giving all pertinent facts, including the duration of the breakdown. The Department shall be notified when the breakdown has been corrected.

7. All air pollution control devices and capture systems for which this permit is issued shall be maintained and operated at all times in a manner so as to minimize the emissions of air contaminants. Procedures for ensuring that the above equipment is properly operated and maintained so as to minimize the emission of air contaminants shall be established.

8. Submission of other reports regarding monitoring records, fuel analyses, operating rates, and equipment malfunctions may be required as authorized in the Department's air pollution control rules and regulations. The Department may require stack emission testing at any time.

9. Additions and revisions to the conditions of this Permit will be made, if necessary, to ensure that the Department's air pollution control rules and regulations are not violated.

10. Nothing in this permit or conditions thereto shall negate any authority granted to the Department pursuant to the Alabama Environmental Management Act or regulations issued thereunder.

A pretest meeting may be held at the request of the source owner or the Department. The necessity for such a meeting and the required attendees will be determined on a case-by-case basis.

All test reports must be submitted to the Department within 15 days of the actual completion of the test, unless an extension of time is specifically approved by the Department.

14. A continuous monitoring system for the measurement of nitrogen oxides shall be installed, calibrated, maintained, and operated by the owner or operator. The owner or operator shall establish a conversion factor for the purpose of converting monitoring data into units of lbs/short ton. The conversion factor shall be established by measuring emissions with the continuous monitoring system concurrent with measuring emissions with the applicable reference method test.

15. All the original data charts, performance evaluations, calibration checks, adjustment and maintenance records and other information regarding monitoring system(s) will be maintained in a permanent form suitable for inspection. The file shall be retained for at least two years following the date of such measurements, maintenance, reports and records.

16. The owner or operator shall record the daily production rate and hours of operation. Records must be kept in permanent form suitable for inspection. The records shall be retained for at least two years and made available upon request.

17. This unit shall not emit to the atmosphere any gases which contain nitrogen oxides, expressed as NO_2, in excess of 20.0 lbs/per ton of acid produced, the production being expressed as 100 percent (100%) nitric acid.

18. Use of this nitric acid plant shall be limited to 59,422 tons of 100 percent (100%) nitric acid production in any 12 consecutive month period. A summary of operations data shall be submitted with each quarterly excess emissions report.

19. A written report of excess emissions shall be submitted to the Department for every calendar year quarter. The requirements of these reports are specified under 40 CFR 60.7.

20. For the purpose of report required, periods of excess emissions that shall be reported are defined as any 3-hour period during which the average nitrogen oxides emissions (arithmetic average of three contiguous 1-hour periods) as measured by a continuous monitoring system exceed the standard.

August 12, 1991
Date

11. Prior to a date to be specified by the Chief of the Air Division in the authorization to operate, emission tests are to be conducted by persons familiar with and using the EPA Sampling Train and Test Procedure as described in the Code of Federal Regulations, Title 40, Part 60, for the following pollutants. Written tests results are to be reported to the Department within 15 working days of completion of testing.

Particulates	( )	Carbon Monoxide	( )*
Sulfur Dioxide	( )	Nitrogen Oxides	(X)*
Volatile Organic Compounds	( )		

* stack emissions test and monitor certification

12. Emissions tests are to be conducted for the following pollutants at intervals not to exceed 24 months following the date of initial compliance testing. All test reports must be submitted to the Department within 15 days of completion of testing.

Particulates	( )	Carbon Monoxide	( )*
Sulfur Dioxide	( )	Nitrogen Oxides	(X)*
Volatile Organic Compounds	( )		

* stack emissions test and monitor certification

13. The Department must be notified in writing at least 10 working days in advance of all emission tests to be conducted and submitted as proof of compliance with the Department's air pollution control rules and regulations.

    To avoid problems concerning testing methods and procedures, the following shall be included with the notification letter:

    (1) The date the test crew is expected to arrive, the date and time anticipated of the start of the first run, how many and which sources are to be tested, and the names of the persons and/or testing company that will conduct the tests.

    (2) A complete description of each sampling train to be used, including type of media used in determining gas stream components, type of probe lining, type of filter media, and probe cleaning method and solvent to be used (if test procedure requires probe cleaning).

    (3) A description of the process(es) to be tested, including the feed rate, any operating parameter used to control or influence the operations, and the rated capacity.

    (4) A sketch or sketches showing sampling point locations and their relative positions to the nearest upstream and downstream gas flow disturbances.

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ADEM

ALABAMA
DEPARTMENT OF ENVIRONMENTAL MANAGEMENT

AIR PERMIT

PERMITTEE: LAROCHE INDUSTRIES, INC.

LOCATION: CHEROKEE, ALABAMA

PERMIT NUMBER	DESCRIPTION OF EQUIPMENT, ARTICLE OR DEVICE
701-0013-X001	Nitric Acid Plant - Plant No. 1 (350 TPD)

OBSOLETE

In accordance with and subject to the provisions of the Alabama Air Pollution Control Act of 1971, as amended, ***Code of Alabama 1975****, §§ 22-28-1 to 22-28-23 (the "AAPCA") and the Alabama Environmental Management Act, as amended,* ***Code of Alabama 1975****, §§ 22-22A-1 to 22-22A-15, and rules and regulations adopted thereunder, and subject further to the conditions set forth in this permit, the Permittee is hereby authorized to construct, install and use the equipment, device or other article described above.*

ISSUANCE DATE: October 9, 1990

Alabama Department of Environmental Management

LAROCHE INDUSTRIES, INC.

Permit No. 701-0013-X001

1. This permit is issued on the basis of Rules and Regulations existing on the date of issuance. In the event additional Rules and Regulations are adopted, it shall be the permit holder's responsibility to comply with such rules.

2. This permit is not transferable. Upon sale or legal transfer, the new owner or operator must apply for a permit within 30 days.

3. A new permit application must be made for new sources, replacements, alterations or design changes which may result in the issuance of, or an increase in the issuance of, air contaminants, or the use of which may eliminate or reduce or control the issuance of air contaminants.

4. Each point of emission will be provided with sampling ports, ladders, platforms, and other safety equipment to facilitate testing performed in accordance with procedures established by Part 60 of Title 40 of the Code of Federal Regulations, as the same may be amended or revised.

5. In case of shutdown of air pollution control equipment for scheduled maintenance for a period greater than 2 hours, the intent to shut down shall be reported to the Department at least 24 hours prior to the planned shutdown.

6. In the event there is a breakdown of equipment in such a manner as to cause increased emission of air contaminants for a period greater than 2 hours, the person responsible for such equipment shall notify the Department within an additional 24 hours and provide a statement giving all pertinent facts, including the duration of the breakdown. The Department shall be notified when the breakdown has been corrected.

7. All air pollution control devices and capture systems for which this permit is issued shall be maintained and operated at all times in a manner so as to minimize the emissions of air contaminants. Procedures for ensuring that the above equipment is properly operated and maintained so as to minimize the emission of air contaminants shall be established.

8. Submission of other reports regarding monitoring records, fuel analyses, operating rates, and equipment malfunctions may be required as authorized in the Department's air pollution control rules and regulations. The Department may require stack emission testing at any time.

9. Additions and revisions to the conditions of this Permit will be made, if necessary, to ensure that the Department's air pollution control rules and regulations are not violated.

10. Prior to a date to be specified by the Chief of the Air Division in the authorization to operate, emission tests are to be conducted by persons familiar with and using the EPA Sampling Train and Test Procedure as described in the Code of Federal Regulations, Title 40, Part 60, for the following pollutants. Written tests results are to be reported to the Department within 15 working days of completion of testing.

Particulates	( )	Carbon Monoxide	( )
Sulfur Dioxide	( )	Nitrogen Oxides	(X)
Volatile Organic Compounds	( )		

11. Nothing in this permit or conditions thereto shall negate any authority granted to the Department pursuant to the Alabama Environmental Management Act or regulations issued thereunder.

12. All the original data charts, performance evaluations, calibration checks, adjustment and maintenance records and other information regarding monitoring system(s) will be maintained in a permanent form suitable for inspection. The file shall be retained for at least two years following the date of such measurements, maintenance, reports and records.

13. The Department must be notified in writing at least 10 working days in advance of all emission tests to be conducted and submitted as proof of compliance with the Department's air pollution control rules and regulations.

    To avoid problems concerning testing methods and procedures, the following shall be included with the notification letter:

    (1) The date the test crew is expected to arrive, the date and time anticipated of the start of the first run, how many and which sources are to be tested, and the names of the persons and/or testing company that will conduct the tests.

    (2) A complete description of each sampling train to be used, including type of media used in determining gas stream components, type of probe lining, type of filter media, and probe cleaning method and solvent to be used (if test procedure requires probe cleaning).

    (3) A description of the process(es) to be tested, including the feed rate, any operating parameter used to control or influence the operations, and the rated capacity.

    (4) A sketch or sketches showing sampling point locations and their relative positions to the nearest upstream and downstream gas flow disturbances.

    A pretest meeting may be held at the request of the source owner or the Department. The necessity for such a meeting and the required attendees will be determined on a case-by-case basis.

All test reports must be submitted to the Department within 15 days of the actual completion of the test, unless an extension of time is specifically approved by the Department.

14. A continuous monitoring system for the measurement of nitrogen oxides shall be installed, calibrated, maintained, and operated by the owner or operator. The owner or operator shall establish a conversion factor for the purpose of converting monitoring data into units of lbs/short ton. The conversion factor shall be established by measuring emissions with the continuous monitoring system concurrent with measuring emissions with the applicable reference method test.

15. The owner or operator shall record the daily production rate and hours of operation. Records must be kept in permanent form suitable for inspection. The records shall be retained for at least two years and made available upon request.

16. Contain nitrogen oxides, expressed as NO_2, in excess of 20.0 lbs/per ton of acid produced, the production being expressed as 100 percent (100%) nitric acid.

17. Use of this nitric acid plant shall be limited to 4,185 hours in any 12 consecutive month period. A summary of operations data shall be submitted with each quarterly excess emissions report.

18. A written report of excess emissions shall be submitted to the Department for every calendar year quarter. The requirements of these reports are specified under 40 CFR 60.7.

19. For the purpose of report required, periods of excess emissions that shall be reported are defined as any 3-hour period during which the average nitrogen oxides emissions (arithmetic average of three contiguous 1-hour periods) as measured by a continuous monitoring system exceed the standard.

October 9, 1990
Date

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ADEM

ALABAMA
DEPARTMENT OF ENVIRONMENTAL MANAGEMENT

AIR PERMIT

PERMITTEE: LAROCHE INDUSTRIES, INC.

LOCATION: CHEROKEE, ALABAMA

PERMIT NUMBER	DESCRIPTION OF EQUIPMENT, ARTICLE OR DEVICE
701-0013-X023	Nitric Acid Plant - Plant No. 2 (600 TPD)

In accordance with and subject to the provisions of the Alabama Air Pollution Control Act of 1971, as amended, ***Code of Alabama 1975****, §§ 22-28-1 to 22-28-23 (the "AAPCA") and the Alabama Environmental Management Act, as amended,* ***Code of Alabama 1975****, §§ 22-22A-1 to 22-22A-15, and rules and regulations adopted thereunder, and subject further to the conditions set forth in this permit, the Permittee is hereby authorized to construct, install and use the equipment, device or other article described above.*

ISSUANCE DATE: August 10, 1989

Alabama Department of Environmental Management

LAROCHE INDUSTRIES, INC.

Permit No. 701-0013-X023

1. This permit is issued on the basis of Rules and Regulations existing on the date of issuance. In the event additional Rules and Regulations are adopted, it shall be the permit holder's responsibility to comply with such rules.

2. This permit is not transferable. Upon sale or legal transfer, the new owner or operator must apply for a permit within 30 days.

3. A new permit application must be made for new sources, replacements, alterations or design changes which may result in the issuance of, or an increase in the issuance of, air contaminants, or the use of which may eliminate or reduce or control the issuance of air contaminants.

4. Each point of emission will be provided with sampling ports, ladders, platforms, and other safety equipment to facilitate testing performed in accordance with procedures established by Part 60 of Title 40 of the Code of Federal Regulations, as the same may be amended or revised.

5. In case of shutdown of air pollution control equipment for scheduled maintenance for a period greater than 2 hours, the intent to shut down shall be reported to the Department at least 24 hours prior to the planned shutdown.

6. In the event there is a breakdown of equipment in such a manner as to cause increased emission of air contaminants for a period greater than 2 hours, the person responsible for such equipment shall notify the Department within an additional 24 hours and provide a statement giving all pertinent facts, including the duration of the breakdown. The Department shall be notified when the breakdown has been corrected.

7. All air pollution control devices and capture systems for which this permit is issued shall be maintained and operated at all times in a manner so as to minimize the emissions of air contaminants. Procedures for ensuring that the above equipment is properly operated and maintained so as to minimize the emission of air contaminants shall be established.

8. This permit expires and the application is cancelled if construction has not begun within 24 months of the date of issuance of the permit.

9. On completion of construction of the device for which this permit is issued, notification of the fact is to be given to the Chief of the Air Division at least 10 days in advance of planned operation of the unit. Authorization to operate the unit must be received from the Chief of the Air Division. Failure to notify the Chief of the Air Division of completion of construction and/or operation without authorization could result in revocation of this permit.

10. Prior to a date to be specified by the Chief of the Air Division in the authorization to operate, emission tests are to be conducted by persons familiar with and using the EPA Sampling Train and Test Procedure as described in the Code of Federal Regulations, Title 40, Part 60, for the following pollutants. Written tests results are to be reported to the Department within 15 working days of completion of testing.

Particulates	( )	Carbon Monoxide	( )
Sulfur Dioxide	( )	Nitrogen Oxides	(X)
Volatile Organic Compounds	( )		

11. Submission of other reports regarding monitoring records, fuel analyses, operating rates, and equipment malfunctions may be required as authorized in the Department's air pollution control rules and regulations. The Department may require stack emission testing at any time.

12. Additions and revisions to the conditions of this Permit will be made, if necessary, to ensure that the Department's air pollution control rules and regulations are not violated.

13. Nothing in this permit or conditions thereto shall negate any authority granted to the Department pursuant to the Alabama Environmental Management Act or regulations issued thereunder.

14. The Department must be notified in writing at least 10 working days in advance of all emission tests to be conducted and submitted as proof of compliance with the Department's air pollution control rules and regulations.

    To avoid problems concerning testing methods and procedures, the following shall be included with the notification letter:

    (1) The date the test crew is expected to arrive, the date and time anticipated of the start of the first run, how many and which sources are to be tested, and the names of the persons and/or testing company that will conduct the tests.

    (2) A complete description of each sampling train to be used, including type of media used in determining gas stream components, type of probe lining, type of filter media, and probe cleaning method and solvent to be used (if test procedure requires probe cleaning).

    (3) A description of the process(es) to be tested, including the feed rate, any operating parameter used to control or influence the operations, and the rated capacity.

    (4) A sketch or sketches showing sampling point locations and their relative positions to the nearest upstream and downstream gas flow disturbances.

A pretest meeting may be held at the request of the source owner or the Department. The necessity for such a meeting and the required attendees will be determined on a case-by-case basis.

All test reports must be submitted to the Department within 15 days of the actual completion of the test, unless an extension of time is specifically approved by the Department.

15. All the original data charts, performance evaluations, calibration checks, adjustment and maintenance records and other information regarding monitoring system(s) will be maintained in a permanent form suitable for inspection. The file shall be retained for at least two years following the date of such measurements, maintenance, reports and records.

16. This unit is subject to the federal New Source Performance Standards (NSPS) as listed in 40 CFR, Subpart G - Standards of Performance for Nitric Acid Plants.

17. Use of this nitric acid plant shall be limited to 8,640 hours in any 12 consecutive months. A summary of operations data shall be submitted with each quarterly excess emissions report.

18. The current permit for Nitric Acid Plant No. 1, Permit No. 701-0013-Z001, shall expire upon completion of the construction of this unit. At the time construction of this unit is completed revised Permit No. 701-0013-X001 will become effective.

August 10, 1989
Date

#8

ADEM

ALABAMA
DEPARTMENT OF ENVIRONMENTAL MANAGEMENT

AIR PERMIT

This has been superceded

PERMITTEE: LA ROCHE INDUSTRIES, INC.

LOCATION: CHEROKEE, ALABAMA

PERMIT NUMBER	DESCRIPTION OF EQUIPMENT, ARTICLE OR DEVICE
701-0013-Z001	Nitric Acid Plant - 375 TPD

OBSOLETE

*In accordance with and subject to the provisions of the Alabama Air Pollution Control Act of 1971, as amended, **Code of Alabama 1975**, §§ 22-28-1 to 22-28-23 (the "AAPCA") and the Alabama Environmental Management Act, as amended, **Code of Alabama 1975**, §§ 22-22A-1 to 22-22A-15, and rules and regulations adopted thereunder, and subject further to the conditions set forth in this permit, the Permittee is hereby authorized to construct, install and use the equipment, device or other article described above.*

ISSUANCE DATE: June 23, 1986

John Allen

Alabama Department of Environmental Management

LA ROCHE INDUSTRIES, INC.

Permit No. 701-0013-Z001

1. This permit is issued on the basis of Rules and Regulations existing on the date of issuance. In the event additional Rules and Regulations are adopted, it shall be the permit holder's responsibility to comply with such rules.

2. This permit is not transferable. Upon sale or legal transfer, the new owner or operator must apply for a permit within 30 days.

3. A new permit application must be made for new sources, replacements, alterations or design changes which may result in the issuance of, or an increase in the issuance of, air contaminants, or the use of which may eliminate or reduce or control the issuance of air contaminants.

4. Each point of emission will be provided with sampling ports, ladders, platforms, and other safety equipment to facilitate testing performed in accordance with procedures established by Part 60 of Title 40 of the Code of Federal Regulations, as the same may be amended or revised.

5. In case of shutdown of air pollution control equipment for scheduled maintenance for a period greater than 4 hours, the intent to shut down shall be reported to the Department at least 24 hours prior to the planned shutdown.

6. In the event there is a breakdown of equipment in such a manner as to cause increased emission of air contaminants for a period greater than 4 hours, the person responsible for such equipment shall notify the Department within an additional 24 hours and provide a statement giving all pertinent facts, including the duration of the breakdown. The Department shall be notified when the breakdown has been corrected.

7. All air pollution control devices and capture systems for which this permit is issued shall be maintained and operated at all times in a manner so as to minimize the emissions of air contaminants. Procedures for ensuring that the above equipment is properly operated and maintained so as to minimize the emission of air contaminants shall be established.

8. Emission tests are to be conducted for the following pollutants at intervals not to exceed 2 years following the date of initial compliance testing. All test reports must be submitted to the Department within 15 days of completion of testing.

Particulates	( )	Carbon Monoxide	( )
Sulfur Dioxide	( )	Nitrogen Oxides	(X)
Hydrocarbons	( )		

9. Submission of other reports regarding monitoring records, fuel analyses, operating rates, and equipment malfunctions may be required as authorized in the Department's air pollution control rules and regulations.

10. Additions and revisions to the conditions of this Permit will be made, if necessary, to ensure that the Department's air pollution control rules and regulations are not violated.

11. Nothing in this permit or conditions thereto shall negate any authority granted to the Department pursuant to the Alabama Environmental Management Act or regulations issued thereunder.

12. This permit is issued with the provision that the operation of this facility by the owner or operator will not result in emissions of obnoxious odors.

13. The Department must be notified in writing at least 10 working days in advance of all emission tests to be conducted and submitted as proof of compliance with the Department's air pollution control rules and regulations.

    To avoid problems concerning testing methods and procedures, the following shall be included with the notification letter:

    (1) The date the test crew is expected to arrive, the date and time anticipated of the start of the first run, how many and which sources are to be tested, and the names of the persons and/or testing company that will conduct the tests.

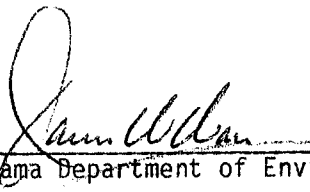
    (2) A complete description of each sampling train to be used, including type of media used in determining gas stream components, type of probe lining, type of filter media, and probe cleaning method and solvent to be used (if test procedure requires probe cleaning).

    (3) A description of the process(es) to be tested, including the feed rate, any operating parameter used to control or influence the operations, and the rated capacity.

    (4) A sketch or sketches showing sampling point locations and their relative positions to the nearest upstream and downstream gas flow disturbances.

    A pretest meeting may be held at the request of the source owner or the Department. The necessity for such a meeting and the required attendees will be determined on a case-by-case basis.

    All test reports must be submitted to the Department within 15 days of the actual completion of the test, unless an extension of time is specifically approved by the Department.



Alabama Department of Environmental Management

June 23, 1986
Date